TEST REPORT

Product	:	E-POS
Trade mark	:	RONGTA
Model/Type reference	:	AP02, AP02A, AP02B, RP02, TP02, TP02A, TP02B, SP02, SP02A, SP02B
Serial Number	:	N/A
Report Number	:	EED32J00230704
FCC ID	:	2AD6G-AP02
Date of Issue	:	Jan. 26, 2018
Test Standards	:	47 CFR Part 2 47 CFR Part 22 subpart H 47 CFR Part 24 subpart E
Test result	:	PASS

Prepared for:

XIAMEN RONGTA TECHNOLOGY CO., LTD.
3F-1/E Building, No.195 Gaoqishe, Gaodian Village,
Dianqian Street Office, Huli District, Xiamen City, China

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

Tested By:	Tom- chen	Compiled by:	Mill chen
	Tom chen (Test Project)		Mill chen (Project Engineer)
Reviewed by:	Kevin Yang	Approved by:	Sheek. Luo
	Kevin yang (Reviewer)		Sheek Luo (Lab supervisor)
Date:	Jan. 26, 2018		Check No.:2447672866

CENTRE TESTING INTERNATIONAL GROUP CO.,LTD. Report Seal

2 Version

Version No.	Date	Description
00	Jan. 26, 2018	Original

3 Test Summary

GSM 850, WCDMA(Band V)			
Test Item	**Test Requirement**	**Test method**	**Result**
Conducted output power	Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016 &KDB 971168 D01v03	PASS
Effective Radiated Power of Transmitter(ERP)	Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016 &KDB 971168 D01v03	PASS
99%&26dB Occupied Bandwidth	Part 2.1049(h)	Part 22.917(b) &KDB 971168 D01v03	PASS
Band Edge at antenna terminals	Part 2.1051/Part 22.917(a)	Part 22.917(b) &KDB 971168 D01v03	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 2.1057/ Part 22.917(a)(b)	TIA-603-E-2016 &KDB 971168 D01v03	PASS
Field strength of spurious radiation	Part 2.1053/ Part 2.1057/ Part 22.917(a)(b)	TIA-603-E-2016 &KDB 971168 D01v03	PASS
Frequency stability	Part 2.1055/ Part 22.355	TIA-603-E-2016 &KDB 971168 D01v03	PASS
GSM 1900,WCDMA(Band II)			
Test Item	**Test Requirement**	**Test method**	**Result**
Conducted output power	Part 2.1046(a) /Part 24.232(c)	TIA-603-E-2016&KDB 971168 D01v03	PASS
Effective Radiated Power of Transmitter(EIRP)	Part 2.1046(a) / Part 24.232(c)	TIA-603-E-2016 &KDB 971168 D01v03	PASS
peak-to-average ratio	Part 24.232(d)	KDB 971168 D01v03	PASS
99% &26dBOccupied Bandwidth	Part 2.1049(h)	Part 24.238(b) &KDB 971168 D01v03	PASS
Band Edge at antenna terminals	Part 2.1051/ Part 24.238(a)	Part 24.238(b) &KDB 971168 D01v03	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 2.1057/ Part 24.238(a)(b)	TIA-603-E-2016 &KDB 971168 D01v03	PASS
Field strength of spurious radiation	Part 2.1053 /Part 2.1057 / Part 24.238(a)(b)	TIA-603-E-2016 &KDB 971168 D01v03	PASS
Frequency stability	Part 2.1055/Part 24.235	TIA-603-E-2016 &KDB 971168 D01v03	PASS

Remark:
The tested sample and the sample information are provided by the client.
Model No.:AP02, AP02A, AP02B, RP02, TP02, TP02A, TP02B, SP02, SP02A, SP02B
Only the model AP02 was tested, since their electrical circuit design, layout, components and internal wiring are identical. Only the model name and color are different.

4 Content

1 COVER PAGE 1

2 VERSION 2

3 TEST SUMMARY 3

4 CONTENT 4

5 TEST REQUIREMENT 5

5.1 TEST SETUP 5
5.1.1 For Conducted test setup 5
5.1.2 For Radiated Emissions test setup 5
5.2 TEST ENVIRONMENT 6
5.3 TEST CONDITION 6

6 GENERAL INFORMATION 8

6.1 CLIENT INFORMATION 8
6.2 GENERAL DESCRIPTION OF EUT 8
6.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD 8
6.4 DESCRIPTION OF SUPPORT UNITS 8
6.5 TEST FACILITY 9
6.6 DEVIATION FROM STANDARDS 9
6.7 ABNORMALITIES FROM STANDARD CONDITIONS 9
6.8 OTHER INFORMATION REQUESTED BY THE CUSTOMER 9
6.9 MEASUREMENT UNCERTAINTY (95% CONFIDENCE LEVELS, K=2) 9

7 EQUIPMENT LIST 10

8 RADIO TECHNICAL REQUIREMENTS SPECIFICATION 12

Appendix A): RF Power Output 13
Appendix B): Peak-to-Average Ratio 17
Appendix C): BandWidth 27
Appendix D): Band Edges Compliance 43
Appendix E): Spurious Emission at Antenna Terminal 52
Appendix F): Frequency Stability 113
Appendix G): Effective Radiated Power of Transmitter (ERP/EIRP) 125
Appendix H): Field strength of spurious radiation 128

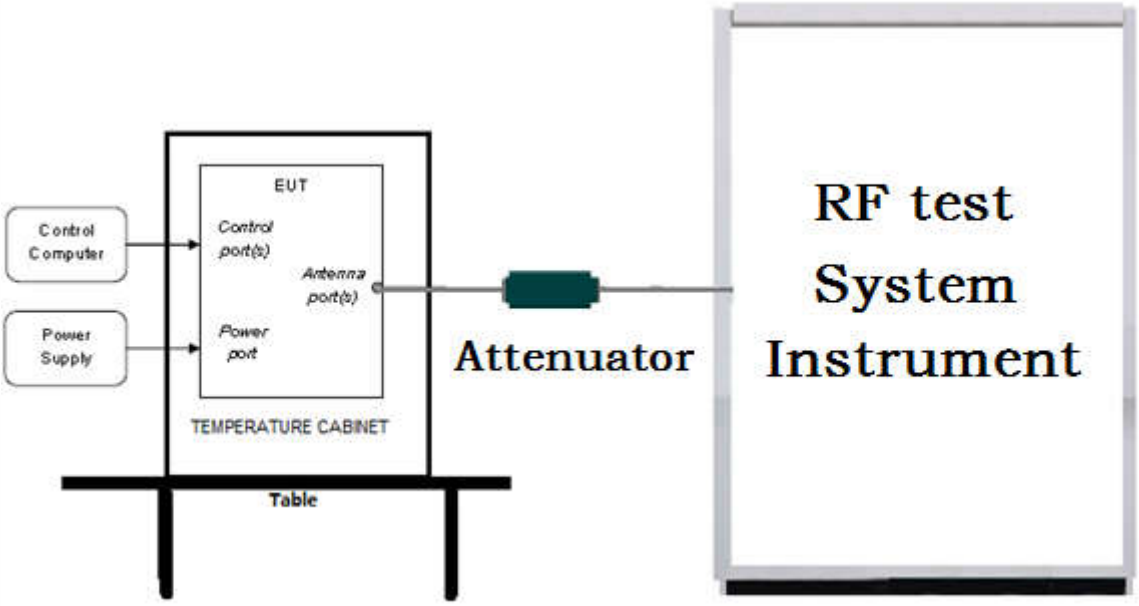
PHOTOGRAPHS OF TEST SETUP 142

PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS 143

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:

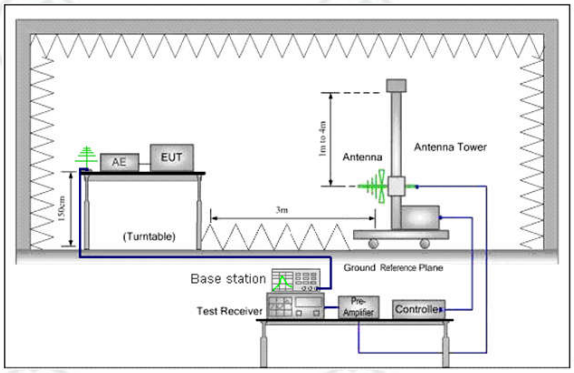


Figure 1.30MHz to 1GHz

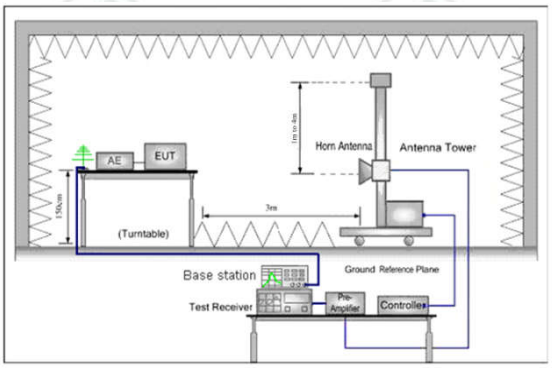


Figure 2. above 1GHz

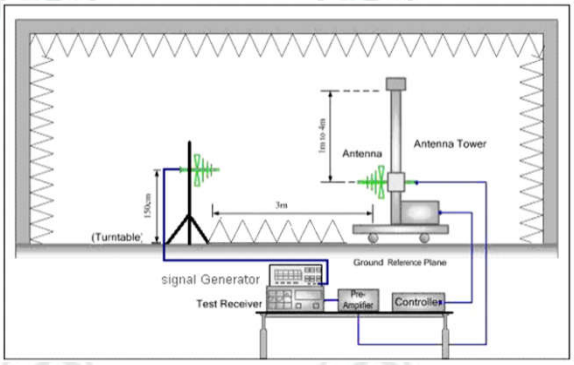


Figure 1. 30MHz to 1GHz

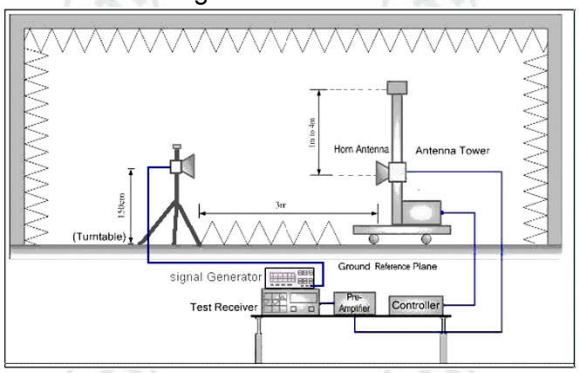


Figure 2. above 1GHz

5.2 Test Environment

Operating Environment:	
Temperature:	23°C
Humidity:	55% RH
Atmospheric Pressure:	1010mbar

5.3 Test Condition

Test channel:

Test Mode	Tx/Rx	RF Channel		
		Low(L)	Middle(M)	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
WCDMA/HSDPA/HSUPA band V	Tx (824 MHz ~849 MHz)	Channel 4132	Channel 4182	Channel 4233
		826.4 MHz	836.4 MHz	846.6 MHz
	Rx (869 MHz ~894 MHz)	Channel 4357	Channel 4407	Channel 4458
		871.4 MHz	881.4 MHz	891.6 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
WCDMA/HSDPA /HSUPA Band II	Tx (1850 MHz ~1910 MHz)	Channel 9262	Channel 9400	Channel 9538
		1852.4 MHz	1880.0 MHz	1907.6 MHz
	Rx (1930 MHz ~1990 MHz)	Channel 9662	Channel 9800	Channel 9938
		1932.4 MHz	1960.0 MHz	1987.6 MHz

Pre-scan all mode and data rates and positions,find the worse case mode as below:

band	Radiated	Conducted
GPRS 850	1)GPRS 8 Link	1)GPRS 8 Link
GPRS 1900	1)GPRS 8 Link	1)GPRS 8 Link
WCDMA Band V	1)RMC 12.2Kbps Link 2)HSDPA 3)HSUPA	1)RMC 12.2Kbps Link 2)HSDPA 3)HSUPA
WCDMA Band II	1)RMC 12.2Kbps Link 2)HSDPA 3)HSUPA	1)RMC 12.2Kbps Link 2)HSDPA 3)HSUPA

Test mode:

Test Mode	Test Modes description
GSM/TM2	GSM system, GPRS, GMSK modulation
Test Mode	Test Modes description
UMTS/TM1	WCDMA system, QPSK modulation
UMTS/TM2	HSDPA system, QPSK modulation
UMTS/TM3	HSUPA system, QPSK modulation

6 General Information

6.1 Client Information

Applicant:	XIAMEN RONGTA TECHNOLOGY CO., LTD.
Address of Applicant:	3F-1/E Building, No.195 Gaoqishe, Gaodian Village, Dianqian Street Office, Huli District, Xiamen City, China
Manufacturer:	XIAMEN RONGTA TECHNOLOGY CO., LTD.
Address of Manufacturer:	3F-1/E Building, No.195 Gaoqishe, Gaodian Village, Dianqian Street Office, Huli District, Xiamen City, China
Factory:	XIAMEN RONGTA TECHNOLOGY CO., LTD.
Address of Factory:	4,5F, G Plant, Gaoqi Industrial Zones, Huli District, Xiamen City, China

6.2 General Description of EUT

Product Name:	E-POS
Mode No.(EUT):	AP02, AP02A, AP02B, RP02, TP02, TP02A, TP02B, SP02, SP02A, SP02B
Test Mode:	AP02
Trade Mark:	RONGTA
EUT Supports Radios application	BT4.0, BT3.0 2402-2480MHz, WiFi b/g/n(HT20) 2.4G wifi 2412-2462MHz, GPRS 850/1900 , UMTS（3G）WCDMA Band II/WCDMA Band V
Hardware version:	C(Manufacturer declare)
Software version :	1.0.0(Manufacturer declare)
Power Supply:	DC 5V by Adapter
	Adapter: Input AC 100-240V,50/60Hz,0.5A. Output DC5V 1A
	DC 3.7V by Battery
	Battery: 3.7V, 6000mAh, 22.2Wh
Sample Received Date:	Oct. 19, 2017
Sample tested Date:	Oct. 19, 2017 to Dec. 22, 2017

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 **WCDMA/HSDPA/HSUPA Band V:** Tx:826.40 -846.60MHz; Rx: 871.40 – 891.60MHz **WCDMA/HSDPA/HSUPA Band II:** Tx:1852.40 – 1907.60MHz; Rx:1932.40 – 1987.60MHz
Modulation Type:	GPRS Mode with GMSK Modulation WCDMA Mode with QPSK Modulation
Sample Type:	Portable
Antenna Type:	Integral
Antenna Gain:	GSM850MHz: 0.5dBi GSM1900MHz: 1dBi WCDMA1900MHz: 1dBi WCDMA850MHz: 0.5dBi
Test Voltage:	DC 3.7V

6.4 Description of Support Units

The EUT has been tested independently.

6.5 Test Facility

Test location

The test site a is located on *Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China.* Test site at Centre Testing International Group Co., Ltd has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on November 06, 2014. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

FCC-Designation No.: CN1164

Centre Testing International Group Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The American association for Centre Testing International Group Co., Ltd. EMC laboratory accreditation 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	0.31dB (30MHz-1GHz)
		0.57dB (1GHz-18GHz)
3	Radiated Spurious emission test	4.5dB (30MHz-1GHz)
		4.8dB (1GHz-12.75GHz)
4	Conduction emission	3.6dB (9kHz to 150kHz)
		3.2dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	2.8%
7	DC power voltages	0.025%

7 Equipment List

Communication RF test system					
Equipment	**Manufacturer**	**Mode No.**	**Serial Number**	**Cal. Date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
Spectrum Analyzer	Agilent	E4440A	MY46185649	12-16-2016	12-15-2017
Spectrum Analyzer	Agilent	E4440A	MY46185649	11-16-2017	11-15-2018
Signal Generator	Agilent	E4438C	MY45095744	03-14-2017	03-13-2018
Communication test set	Agilent	E5515C	GB47050534	03-14-2017	03-13-2018
Signal Generator	Keysight	E8257D	MY53401106	03-14-2017	03-13-2018
Communication test set	R&S	CMW500	152394	03-14-2017	03-13-2018
High-pass filter	Sinoscite	FL3CX03WG18 NM12-0398-002	---	01-12-2017	01-11-2018
High-pass filter	MICRO-TRONICS	SPA-F-63029-4	---	01-12-2017	01-11-2018
band rejection filter	Sinoscite	FL5CX01CA09C L12-0395-001	---	01-12-2017	01-11-2018
band rejection filter	Sinoscite	FL5CX01CA08C L12-0393-001	---	01-12-2017	01-11-2018
band rejection filter	Sinoscite	FL5CX02CA04C L12-0396-002	---	01-12-2017	01-11-2018
band rejection filter	Sinoscite	FL5CX02CA03C L12-0394-001	---	01-12-2017	01-11-2018
DC Power	Keysight	E3642A	MY54426112	03-14-2017	03-13-2018
DC Power	Keysight	E3642A	MY54426115	03-14-2017	03-13-2018
PC-2	Lenovo	R4960d	---	04-01-2017	03-31-2018
PC-3	Lenovo	R4960d	---	04-01-2017	03-31-2018
RF control unit	JS Tonscend	JS0806-1	158060004	03-14-2017	03-13-2018
DC power Box	JS Tonscend	JS0806-4	158060007	04-01-2017	03-31-2018
WCDMA Automatic test software	JS Tonscend	JS1120-3	---	04-01-2017	03-31-2018
GSM Automatic test software	JS Tonscend	JS1120-3	---	04-01-2017	03-31-2018

Radiated Spurious Emission & Radiated Emission					
Equipment	**Manufacturer**	**Mode No.**	**Serial Number**	**Cal. date (mm-dd-yyyy)**	**Cal. Due date (mm-dd-yyyy)**
3M Chamber & Accessory Equipment	TDK	SAC-3	---	06-05-2016	06-05-2019
TRILOG Broadband Antenna	SCHWARZBECK	VULB9163	9163-484	05-23-2017	05-22-2018
Microwave Preamplifier	Agilent	8449B	3008A02425	02-16-2017	02-15-2018
Horn Antenna	ETS-LINDGREN	3117	00057407	07-20-2015	07-18-2018
Loop Antenna	ETS	6502	00071730	06-22-2017	06-21-2019
Spectrum Analyzer	R&S	FSP40	100416	06-13-2017	06-12-2018
Receiver	R&S	ESCI	100435	06-13-2017	06-12-2018
Multi device Controller	maturo	NCD/070/10711112	---	01-12-2017	01-11-2018
LISN	schwarzbeck	NNBM8125	81251547	06-13-2017	06-12-2018
LISN	schwarzbeck	NNBM8125	81251548	06-13-2017	06-12-2018
Signal Generator	Agilent	E4438C	MY45095744	03-14-2017	03-13-2018
Signal Generator	Keysight	E8257D	MY53401106	03-14-2017	03-13-2018
Temperature/ Humidity Indicator	TAYLOR	1451	1905	05-08-2017	05-07-2018
Communication test set	Agilent	E5515C	GB47050534	03-14-2017	03-13-2018
Cable line	Fulai(7M)	SF106	5219/6A	01-12-2017	01-11-2018
Cable line	Fulai(6M)	SF106	5220/6A	01-12-2017	01-11-2018
Cable line	Fulai(3M)	SF106	5216/6A	01-12-2017	01-11-2018
Cable line	Fulai(3M)	SF106	5217/6A	01-12-2017	01-11-2018
Communication test set	R&S	CMW500	152394	03-14-2017	03-13-2018
High-pass filter(3-18GHz)	Sinoscite	FL3CX03WG18NM12-0398-002	---	01-12-2017	01-11-2018
High-pass filter(6-18GHz)	MICRO-TRONICS	SPA-F-63029-4	---	01-12-2017	01-11-2018
band rejection filter	Sinoscite	FL5CX01CA09CL12-0395-001	---	01-12-2017	01-11-2018
band rejection filter	Sinoscite	FL5CX01CA08CL12-0393-001	---	01-12-2017	01-11-2018
band rejection filter	Sinoscite	FL5CX02CA04CL12-0396-002	---	01-12-2017	01-11-2018
band rejection filter	Sinoscite	FL5CX02CA03CL12-0394-001	---	01-12-2017	01-11-2018

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 v03

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&KDB 971168 D01v03	Conducted output power	PASS	Appendix A)
Part 24.232(d)	KDB 971168 D01v03	peak-to-average ratio	PASS	Appendix B)
Part 2.1049(h)	Part 22.917(b)/ Part 24.238(b) &KDB 971168 D01v03	99% &26dBOccupied Bandwidth	PASS	Appendix C)
Part 2.1051/Part 22.917(a)/ Part 24.238(a)	Part 22.917(b)/ Part 24.238(b) &KDB 971168 D01v03	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 &KDB 971168 D01v03	Spurious emissions at antenna terminals	PASS	Appendix E)
Part 2.1055/ Part 22.355/ Part 24.235	TIA-603-E &KDB 971168 D01v03	Frequency stability	PASS	Appendix F)
Part 2.1046(a)/Part 22.913(a)/ Part 24.232(c)	TIA-603-E &KDB 971168 D01v03	Effective Radiated Power of Transmitter(ERP)	PASS	Appendix G)
Part 2.1053/ Part 2.1057/ Part 22.917(a)(b)/ Part 24.238(a)(b)	TIA-603-E &KDB 971168 D01v03	Field strength of spurious radiation	PASS	Appendix H)

Appendix A): RF Power Output

Test Requirement:	Part 2.1046(a)
Test Method:	TIA-603-E-2016 Clause 2.2.1
Test Setup:	Refer to section 5 for details
Limit:	

Mode	GSM 850/WCDMA/HSDPA /HSUPA 850 Band V	GSM 1900/WCDMA/HSDPA /HSUPA 1900 Band II
Frequency	824 – 849MHz	1850 – 1910MHz
Limit	38.45dBm（ERP）	33.01dBm（EIRP）

Measurement Procedure:	The transmitter output was connected to a calibrated coaxial cable, attenuator and power meter, the other end of which was connected to a Base Station Simulator. The Base Station Simulator was set to force the EUT to its maximum power setting. The power output at the transmitter antenna port was determined by adding the value of the cable insertion loss to the power reading. The tests were performed at three frequencies (low channel, middle channel and high channel) and on the highest power levels, which can be setup on the transmitters.
Instruments Used:	Refer to section 7 for details
Test Results:	Pass

Test Data:

Test Band	Test Mode	Test Channel	Measured(dbm)	Limit (dbm)	Verdict
GSM850	GSM/TM2	LCH	32.03	38.5	PASS
		MCH	32.02	38.5	PASS
		HCH	32.11	38.5	PASS
Test Band	Test Mode	Test Channel	Measured(dbm)	Limit (dbm)	Verdict
GSM1900	GSM/TM2	LCH	29.56	33	PASS
		MCH	29.79	33	PASS
		HCH	29.46	33	PASS

Test Band	Test Mode	Test Channel	Measured(dbm)	Limit (dbm)	Verdict
WCDMA850	UMTS/TM1	LCH	22.96	38.5	PASS
		MCH	23.46	38.5	PASS
		HCH	23.19	38.5	PASS
Test Band	Test Mode	Test Channel	Measured(dbm)	Limit (dbm)	Verdict
WCDMA850	UMTS/TM2	LCH_SubTest-1	22.00	38.5	PASS
		LCH_SubTest-2	21.14	38.5	PASS
		LCH_SubTest-3	21.11	38.5	PASS
		LCH_SubTest-4	21.10	38.5	PASS
		MCH_SubTest-1	22.12	38.5	PASS
		MCH_SubTest-2	21.56	38.5	PASS
		MCH_SubTest-3	21.56	38.5	PASS
		MCH_SubTest-4	21.52	38.5	PASS
		HCH_SubTest-1	22.24	38.5	PASS
		HCH_SubTest-2	21.44	38.5	PASS
		HCH_SubTest-3	21.35	38.5	PASS
		HCH_SubTest-4	21.28	38.5	PASS

Test Band	Test Mode	Test Channel	Measured(dbm)	Limit (dbm)	Verdict
WCDMA850	UMTS/TM3	LCH_SubTest-1	19.82	38.5	PASS
		LCH_SubTest-2	19.84	38.5	PASS
		LCH_SubTest-3	20.75	38.5	PASS
		LCH_SubTest-4	19.30	38.5	PASS
		LCH_SubTest-5	21.27	38.5	PASS
		MCH_SubTest-1	20.26	38.5	PASS
		MCH_SubTest-2	20.29	38.5	PASS
		MCH_SubTest-3	21.22	38.5	PASS
		MCH_SubTest-4	19.68	38.5	PASS
		MCH_SubTest-5	21.73	38.5	PASS
		HCH_SubTest-1	20.02	38.5	PASS
		HCH_SubTest-2	19.98	38.5	PASS
		HCH_SubTest-3	21.02	38.5	PASS
		HCH_SubTest-4	19.44	38.5	PASS
		HCH_SubTest-5	21.47	38.5	PASS

Test Band	Test Mode	Test Channel	Measured(dbm)	Limit (dbm)	Verdict
WCDMA1900	UMTS/TM1	LCH	18.03	33	PASS
		MCH	17.67	33	PASS
		HCH	17.53	33	PASS
Test Band	Test Mode	Test Channel	Measured(dbm)	Limit (dbm)	Verdict
WCDMA1900	UMTS/TM2	LCH_SubTest-1	15.77	33	PASS
		LCH_SubTest-2	15.21	33	PASS
		LCH_SubTest-3	15.17	33	PASS
		LCH_SubTest-4	15.16	33	PASS
		MCH_SubTest-1	16.05	33	PASS
		MCH_SubTest-2	15.80	33	PASS

		MCH_SubTest-3	15.72	33	PASS
		MCH_SubTest-4	15.72	33	PASS
		HCH_SubTest-1	14.79	33	PASS
		HCH_SubTest-2	14.27	33	PASS
		HCH_SubTest-3	14.25	33	PASS
		HCH_SubTest-4	14.23	33	PASS
Test Band	Test Mode	Test Channel	Measured(dbm)	Limit (dbm)	Verdict
WCDMA1900	UMTS/TM3	LCH_SubTest-1	16.04	33	PASS
		LCH_SubTest-2	15.85	33	PASS
		LCH_SubTest-3	15.48	33	PASS
		LCH_SubTest-4	15.82	33	PASS
		LCH_SubTest-5	15.47	33	PASS
		MCH_SubTest-1	16.10	33	PASS
		MCH_SubTest-2	16.05	33	PASS
		MCH_SubTest-3	15.29	33	PASS
		MCH_SubTest-4	16.11	33	PASS
		MCH_SubTest-5	16.01	33	PASS
		HCH_SubTest-1	15.16	33	PASS
		HCH_SubTest-2	15.10	33	PASS
		HCH_SubTest-3	14.76	33	PASS
		HCH_SubTest-4	15.19	33	PASS
		HCH_SubTest-5	14.83	33	PASS

Appendix B): Peak-to-Average Ratio

Test Requirement:	Part 24.232(d)
Test Method:	KDB 971168 D01
Test Setup:	Refer to section 5 for details
Limit:	13dB
Measurement Procedure:	Use one of the procedures to measure the total peak power and record as PPk. Use one of the applicable procedures to measure the total average power and record as PAvg. Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from: PAPR (dB) = PPk (dBm) - PAvg (dBm).
Instruments Used:	Refer to section 7 for details
Test Results:	Pass

Test Data:

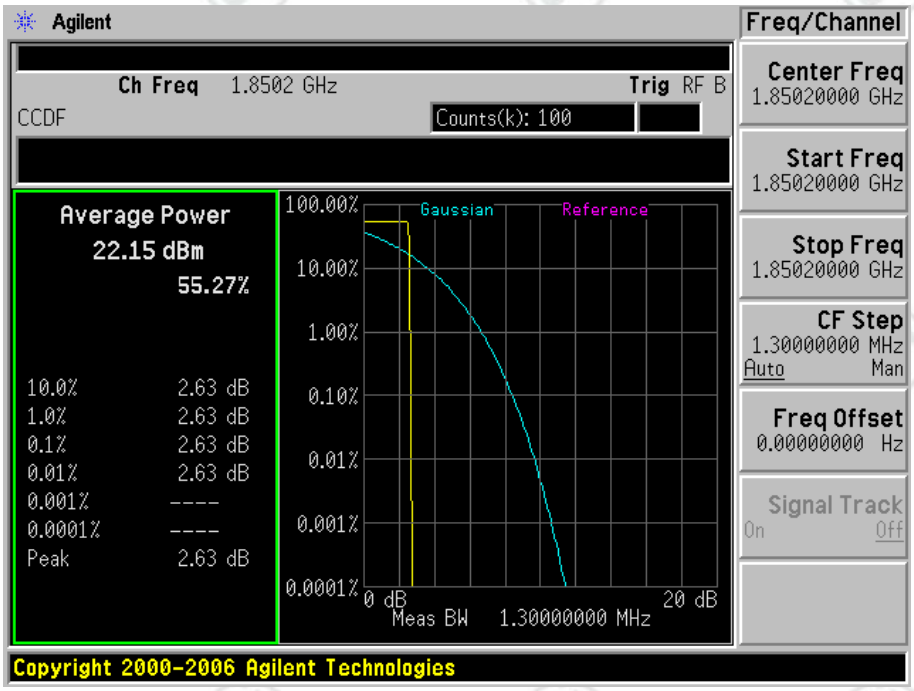
Test Band	Test Mode	Test Channel	Measured (dbm)	Limit (dbm)	Verdict
GSM1900	GSM/TM2	LCH	2.63	13	PASS
		MCH	2.65	13	PASS
		HCH	2.64	13	PASS

1 For GSM

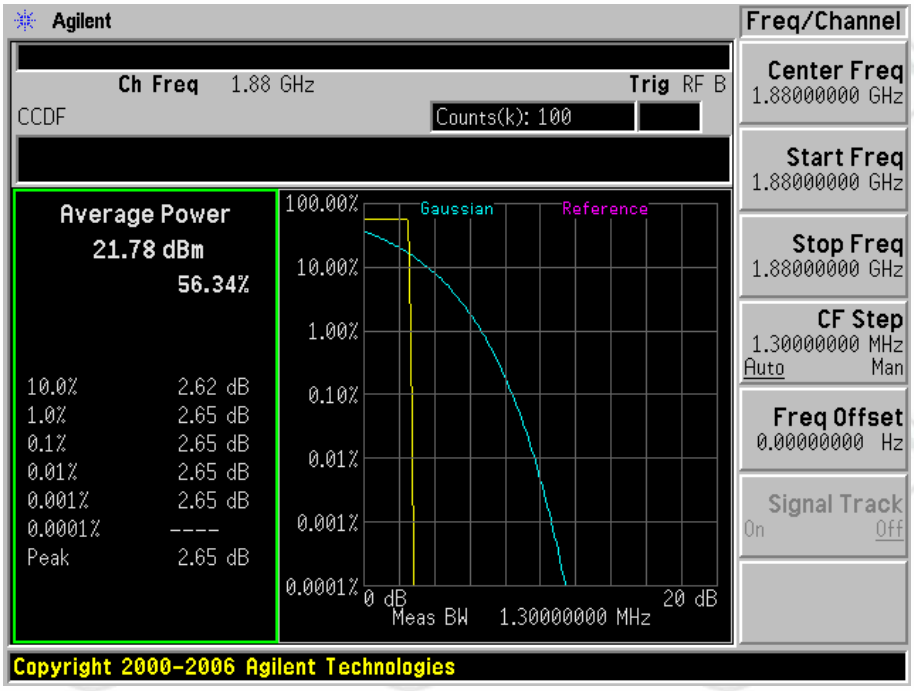
1.1 Test Band=GSM1900

1.1.1.1 Test Mode=UMTS/TM2

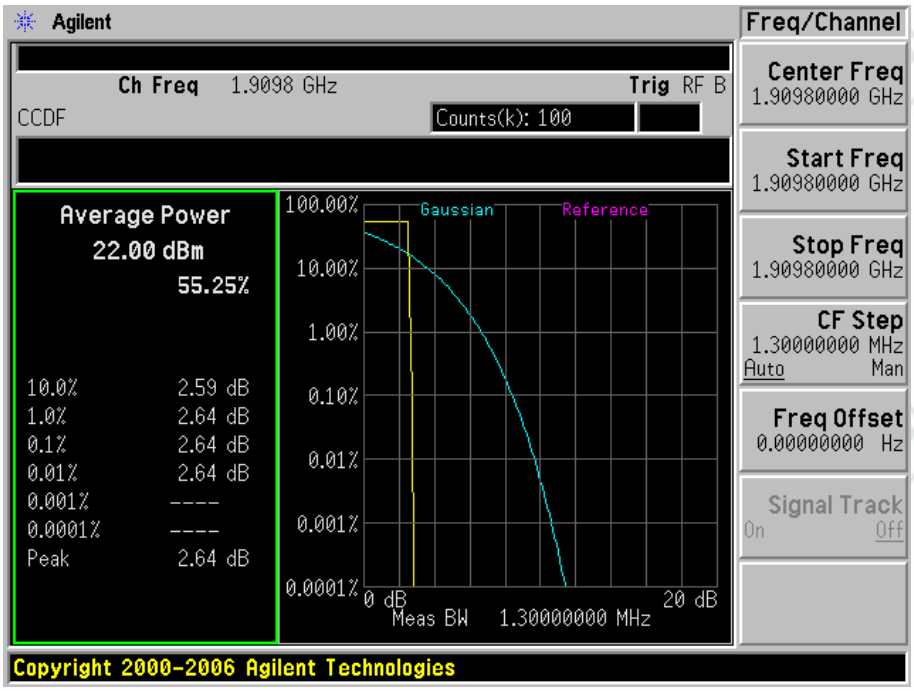
1.1.1.2 Test Channel=LCH



1.1.1.3 Test Channel=MCH



1.1.1.4 Test Channel=HCH



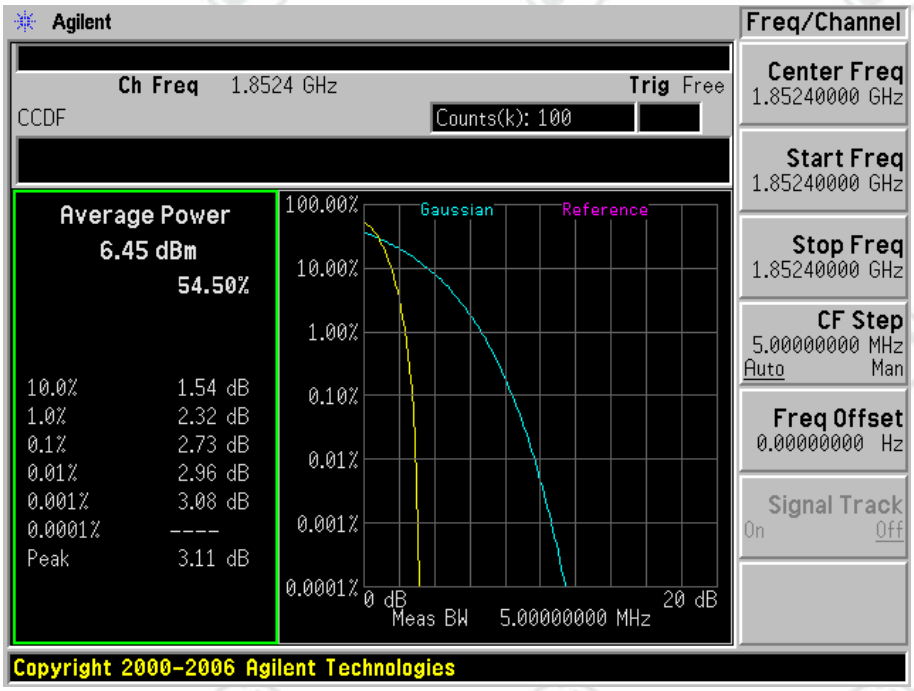
Test Band	Test Mode	Test Channel	Measured(db)	Limit (db)	Verdict
WCDMA1900	UMTS/TM1	LCH	2.73	13	PASS
		MCH	3.19	13	PASS
		HCH	2.94	13	PASS
Test Band	Test Mode	Test Channel	Measured(db)	Limit (db)	Verdict
WCDMA1900	UMTS/TM2	LCH	2.91	13	PASS
		MCH	3.22	13	PASS
		HCH	3.09	13	PASS
Test Band	Test Mode	Test Channel	Measured(db)	Limit (db)	Verdict
WCDMA1900	UMTS/TM3	LCH	3.25	13	PASS
		MCH	3.87	13	PASS
		HCH	3.57	13	PASS

2 For WCDMA

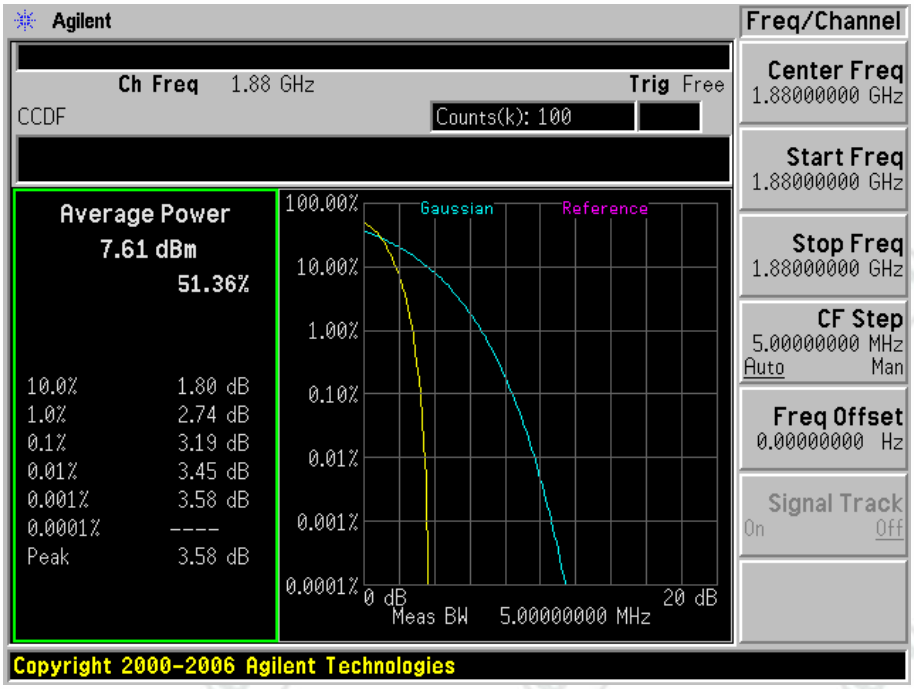
2.1 Test Band=WCDMA1900

2.1.1 Test Mode=UMTS/TM1

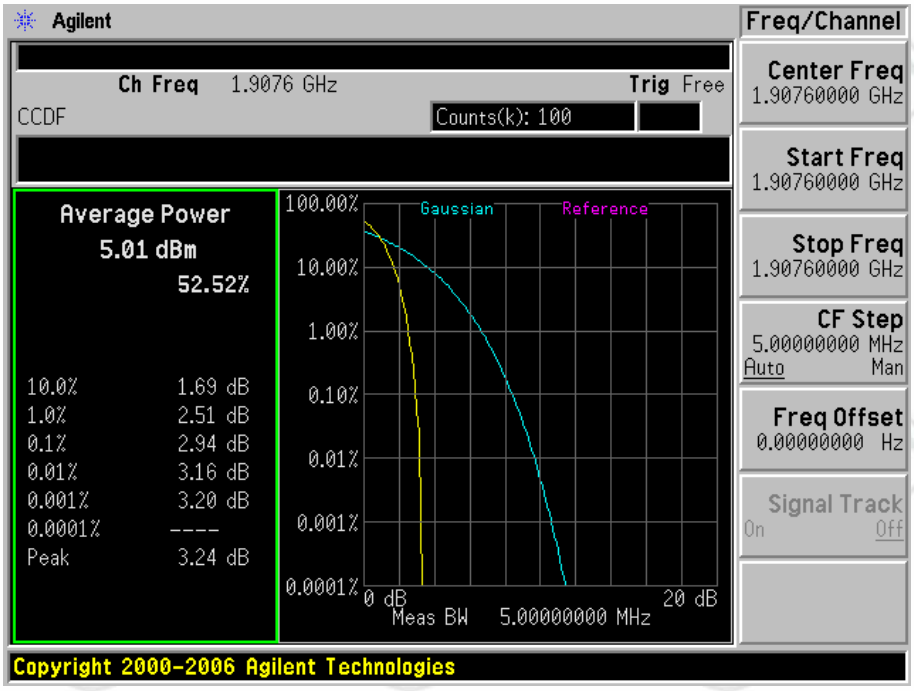
2.1.1.1 Test Channel=LCH



2.1.1.2 Test Channel=MCH

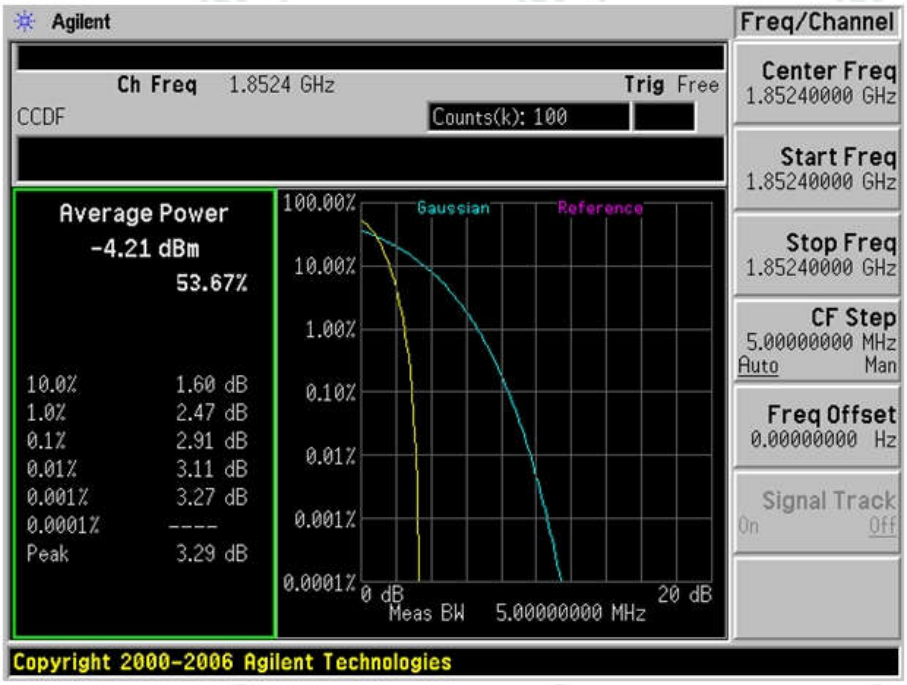


2.1.1.3 Test Channel=HCH

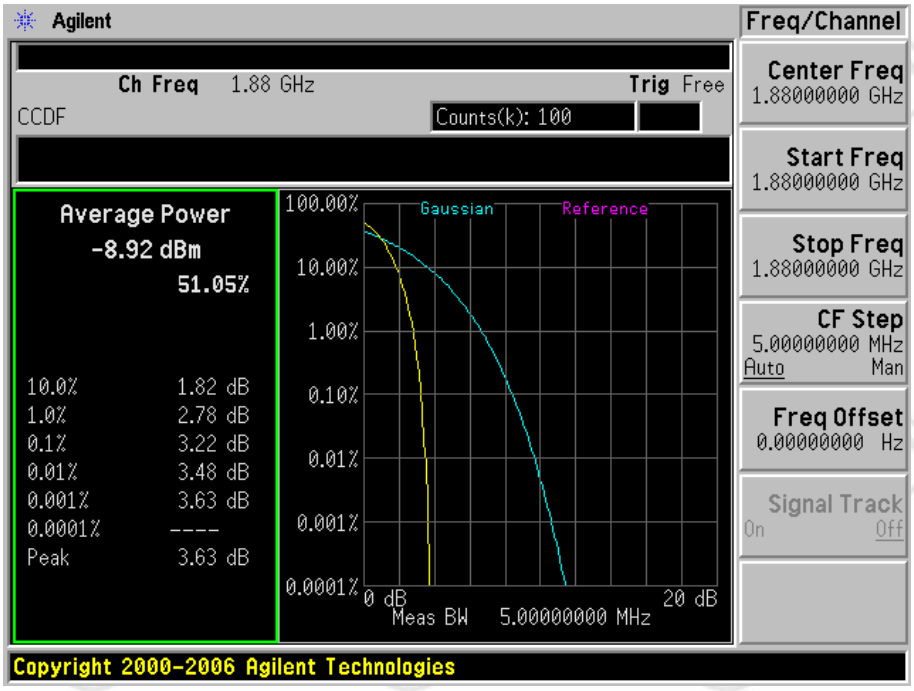


2.1.1.4 Test Mode=UMTS/TM2

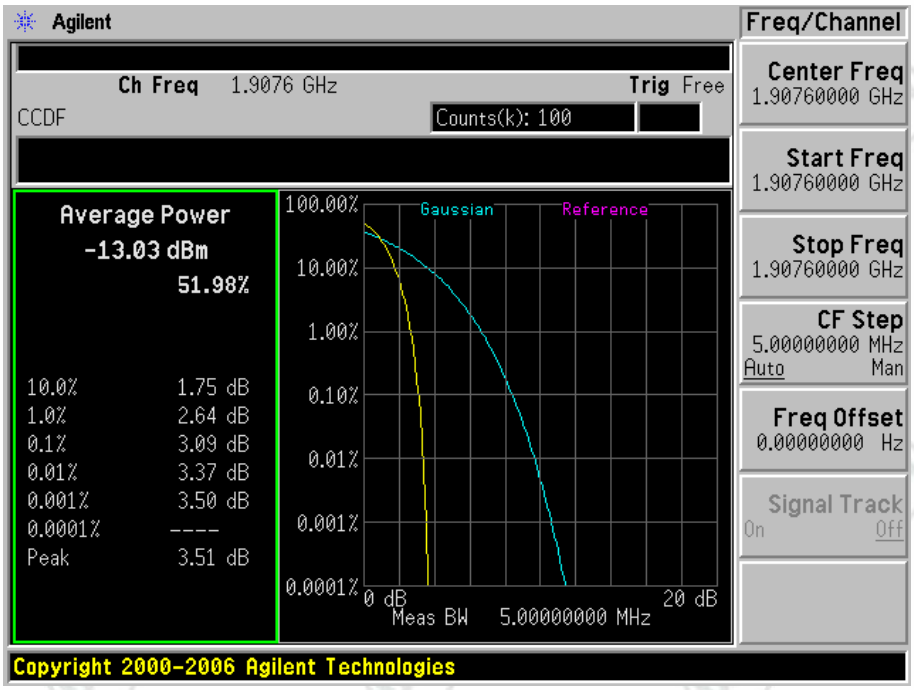
2.1.1.5 Test Channel=LCH



2.1.1.6 Test Channel=MCH

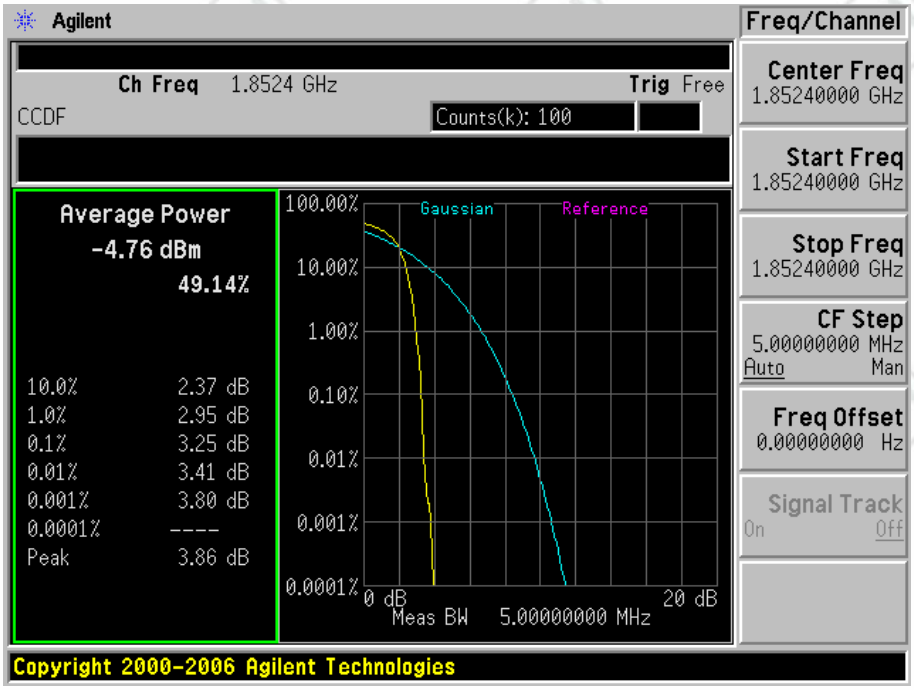


2.1.1.7 Test Channel=HCH

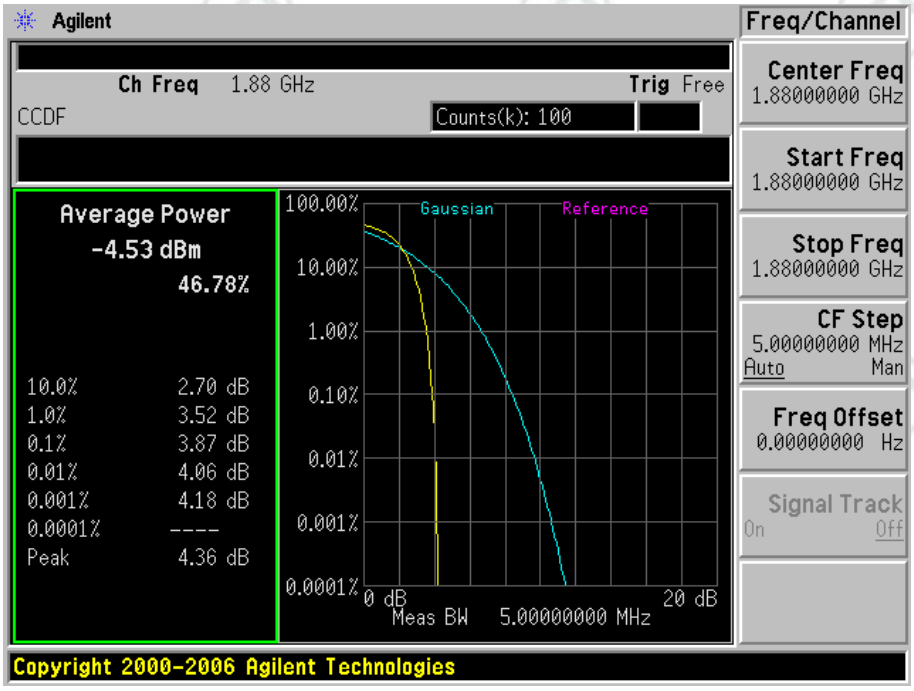


2.1.2 Test Mode=UMTS/TM3

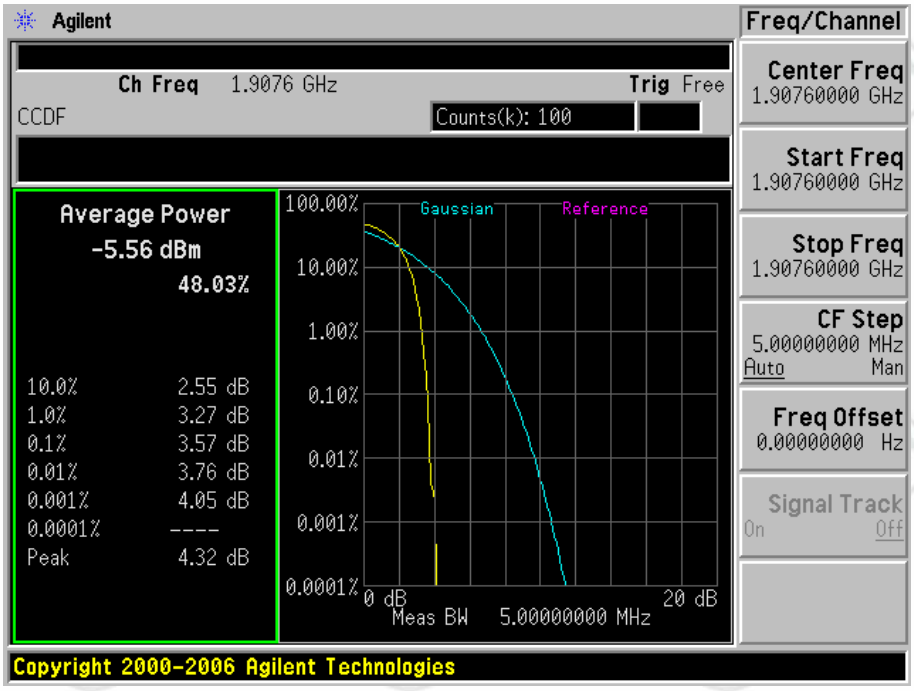
2.1.2.1 Test Channel=LCH



2.1.2.2 Test Channel=MCH



2.1.2.3 Test Channel=HCH



Appendix C): BandWidth

Test Requirement:	Part 2.1049(h)
Test Method:	Part 22.917(b)/Part 24.238(b)
Test Setup:	Refer to section 5 for details
Limit:	N/A
Measurement Procedure:	The transmitter output was connected to a calibrated coaxial cable, attenuator and Spectrum analyser, the other end of which was connected to a Base Station Simulator. The Base Station Simulator was set to force the EUT to its maximum power setting. The tests were performed at three frequencies (low channel, middle channel and high channel).the resolution bandwidth of the analyser is set to 100kHz or 1% of the emission bandwidth, the EUT emission bandwidth is measured as the width of the signal between two points, outside of which all emission are attenuated at least 26dB below the transmitter power. The video bandwidth of the spectrum analyzer was set at thrice the resolution bandwidth. Detector Mode was set to peak or peak hold power.
Instruments Used:	Refer to section 7 for details
Test Results:	Pass

Test data:

Test Band	Test Mode	Test Channel	Occupied Bandwidth (KHZ)	Emission Bandwidth (KHZ)	Verdict
GSM850	GSM/TM 2	LCH	244.81	308.96	PASS
		MCH	245.60	317.99	PASS
		HCH	245.33	317.65	PASS

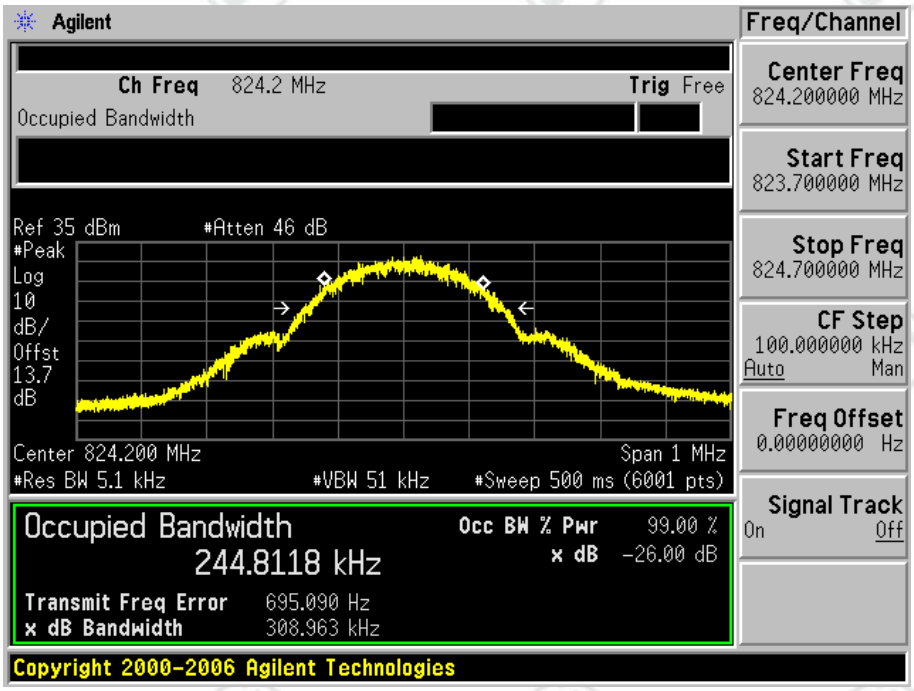
Test Band	Test Mode	Test Channel	Occupied Bandwidth (KHZ)	Emission Bandwidth (KHZ)	Verdict
GSM1900	GSM/TM 2	LCH	245.81	308.90	PASS
		MCH	244.78	312.25	PASS
		HCH	246.80	317.95	PASS

For GSM

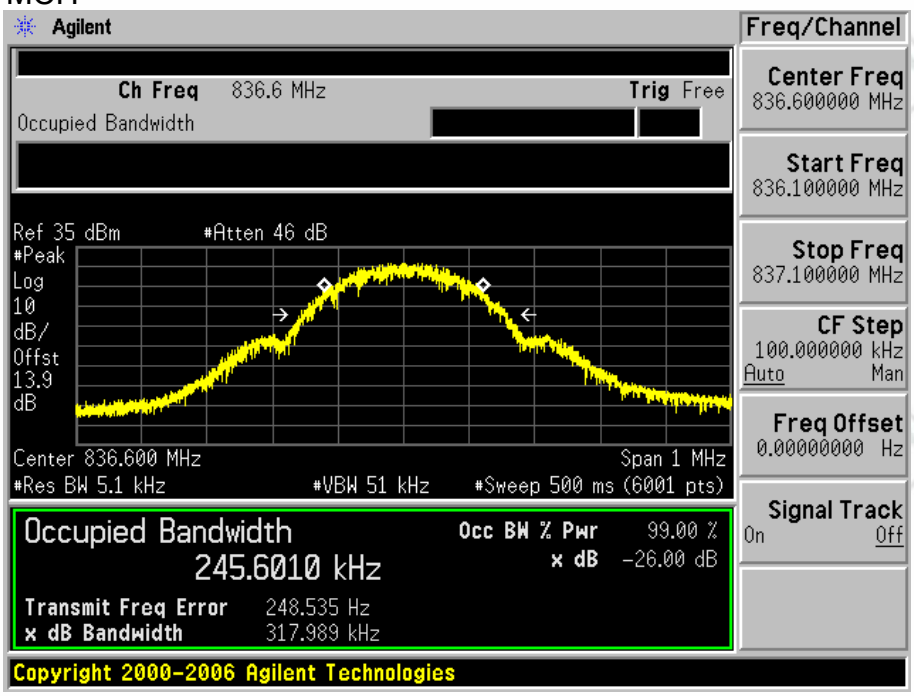
Test Band=GSM850

Test Mode=GSM/TM2

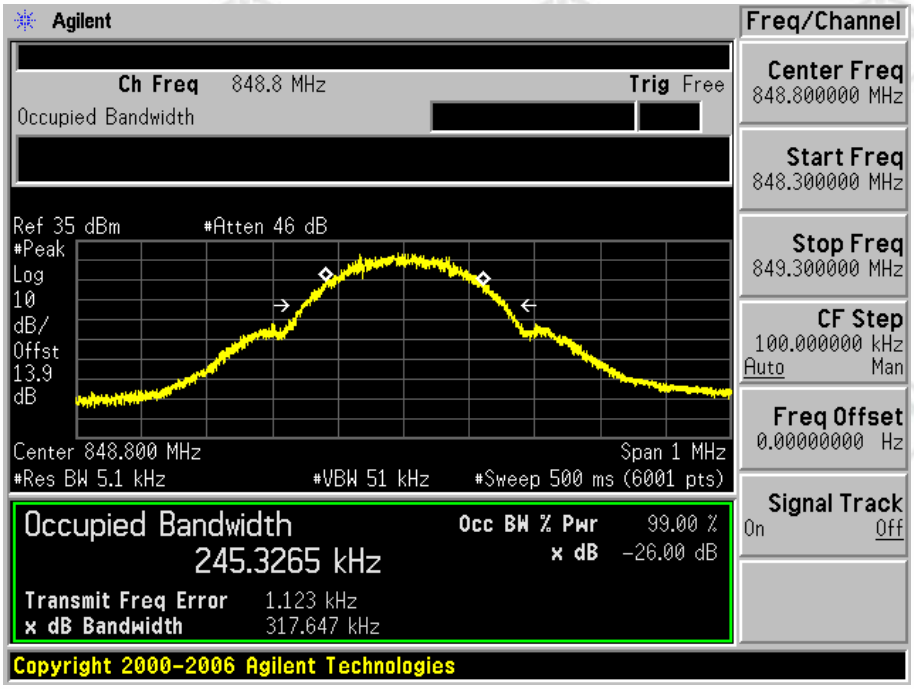
Test Channel=LCH



Test Channel=MCH



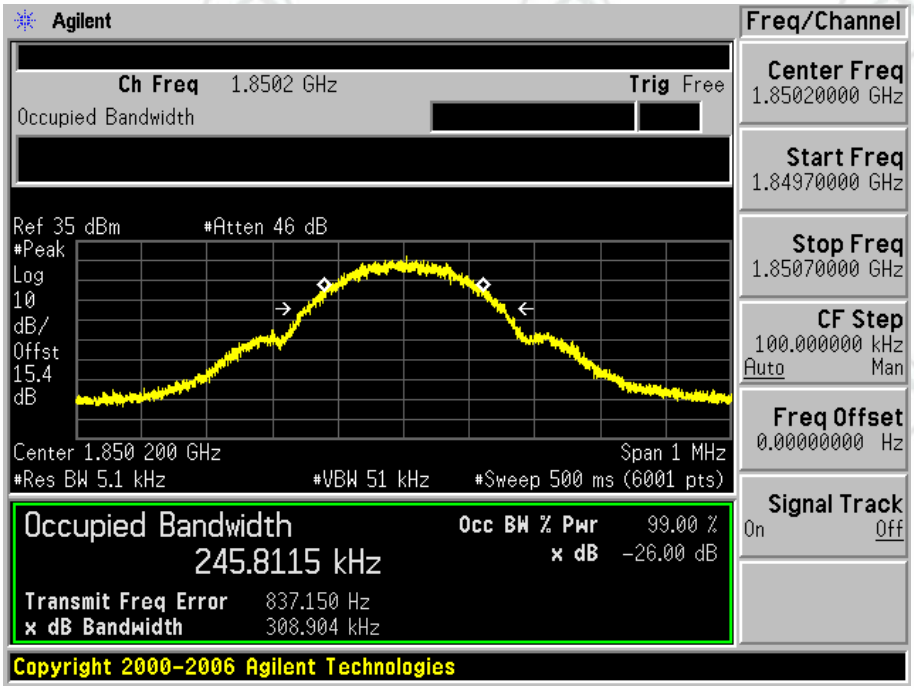
Test Channel=HCH



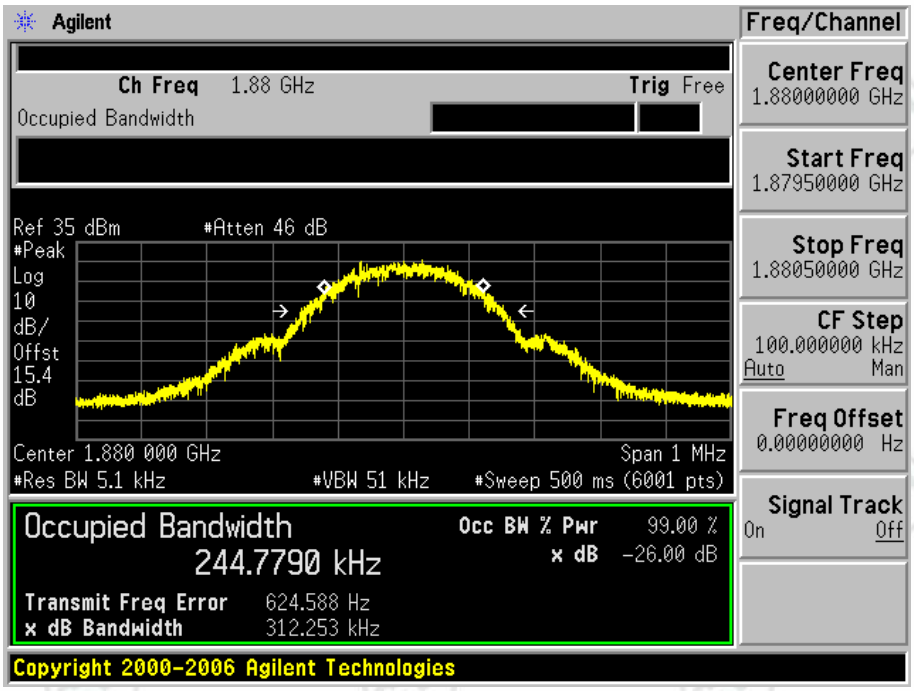
Test Band=GSM1900

Test Mode=GSM/TM2

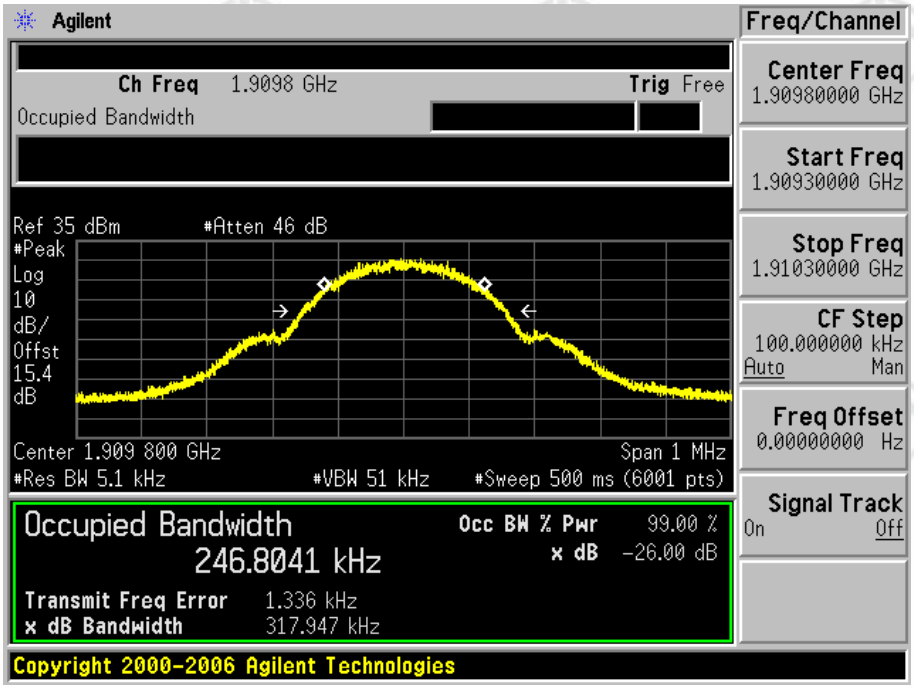
Test Channel=LCH



Test Channel=MCH



Test Channel=HCH



Test Band	Test Mode	Test Channel	Occupied Bandwidth (KHZ)	Emission Bandwidth (KHZ)	Verdict
WCDMA850	UMTS/TM1	LCH	4170.5	4685	PASS
		MCH	4177.8	4708	PASS
		HCH	4141.5	4677	PASS
WCDMA850	UMTS/TM2	LCH	4168.2	4669	PASS
		MCH	4149.2	4670	PASS
		HCH	4149.7	4671	PASS
WCDMA850	UMTS/TM3	LCH	4186.2	4702	PASS
		MCH	4168.6	4686	PASS
		HCH	4149.2	4695	PASS

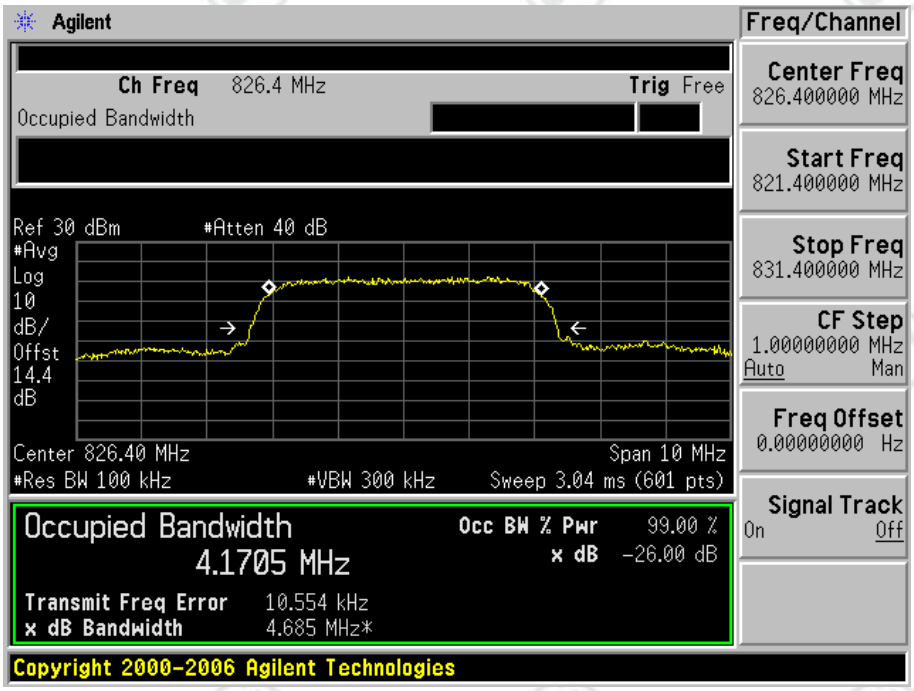
Test Band	Test Mode	Test Channel	Occupied Bandwidth (KHZ)	Emission Bandwidth (KHZ)	Verdict
WCDMA1900	UMTS/TM1	LCH	4168.5	4752	PASS
		MCH	4173.4	4779	PASS
		HCH	4168.1	4701	PASS
WCDMA1900	UMTS/TM2	LCH	4181.7	4710	PASS
		MCH	4147.3	4696	PASS
		HCH	4194.9	4709	PASS
WCDMA1900	UMTS/TM3	LCH	4175.0	4712	PASS
		MCH	4172.4	4722	PASS
		HCH	4185.5	4723	PASS

For WCDMA

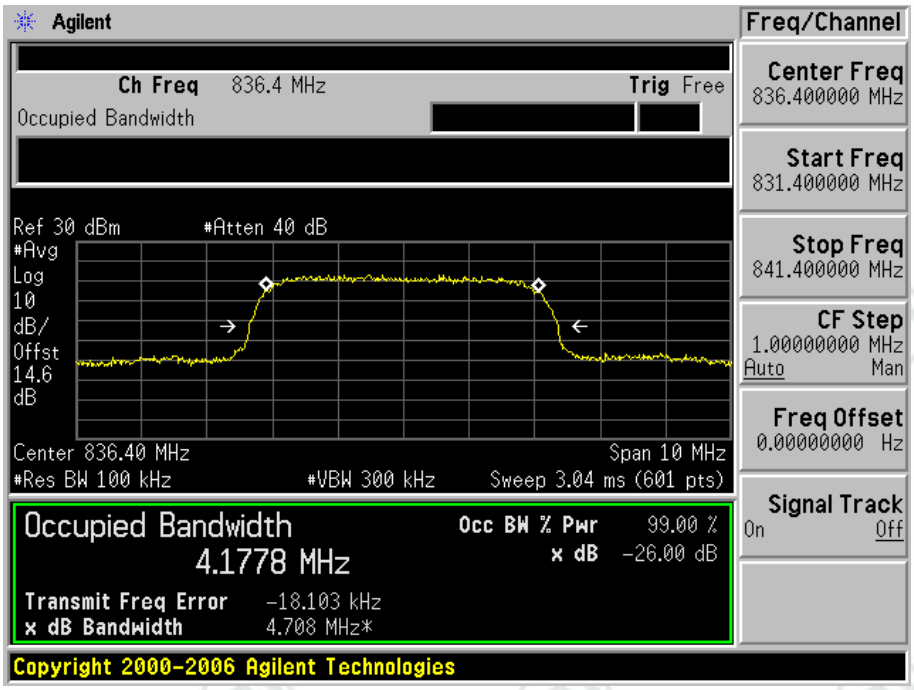
Test Band=WCDMA850

Test Mode=UMTS/TM1

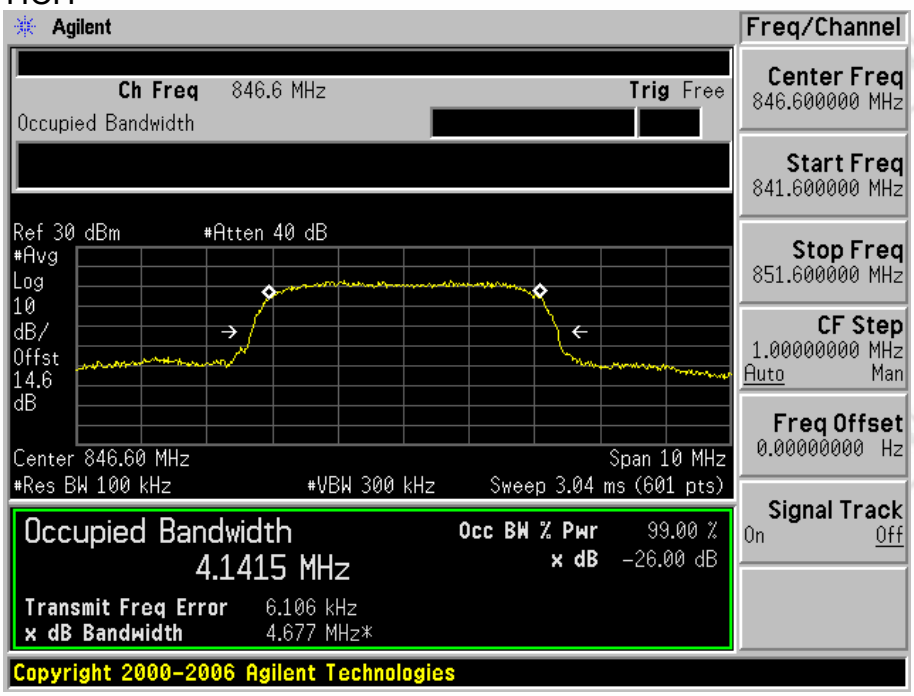
Test Channel=LCH



Test Channel=MCH

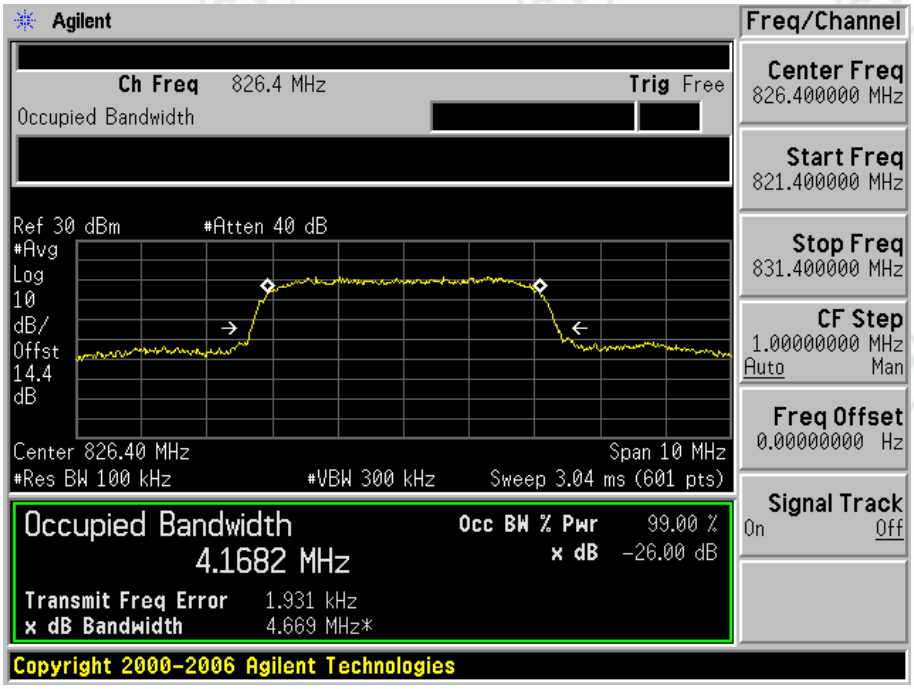


Test Channel=HCH

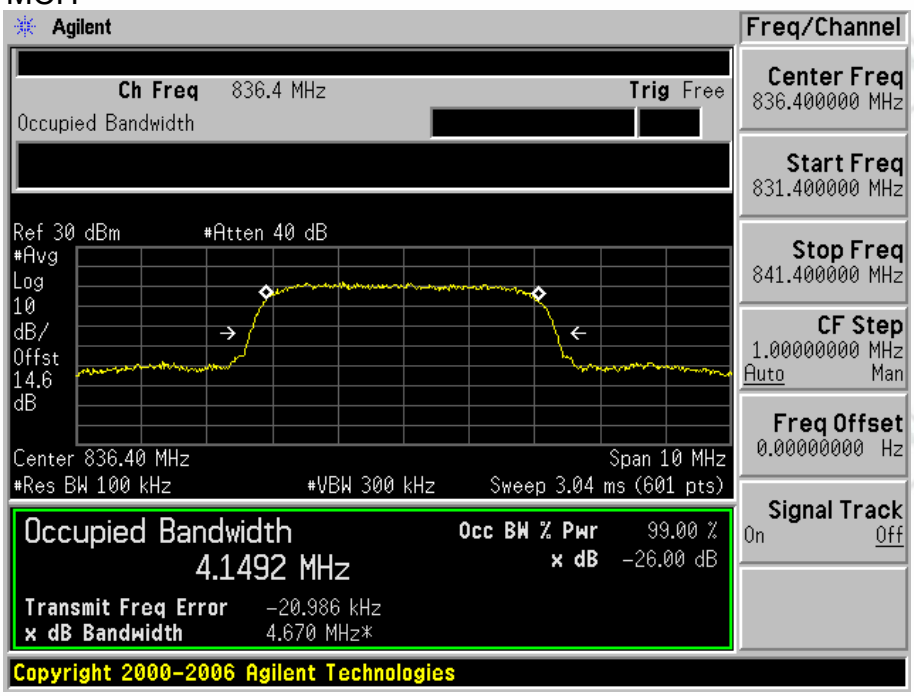


Test Mode=UMTS/TM2

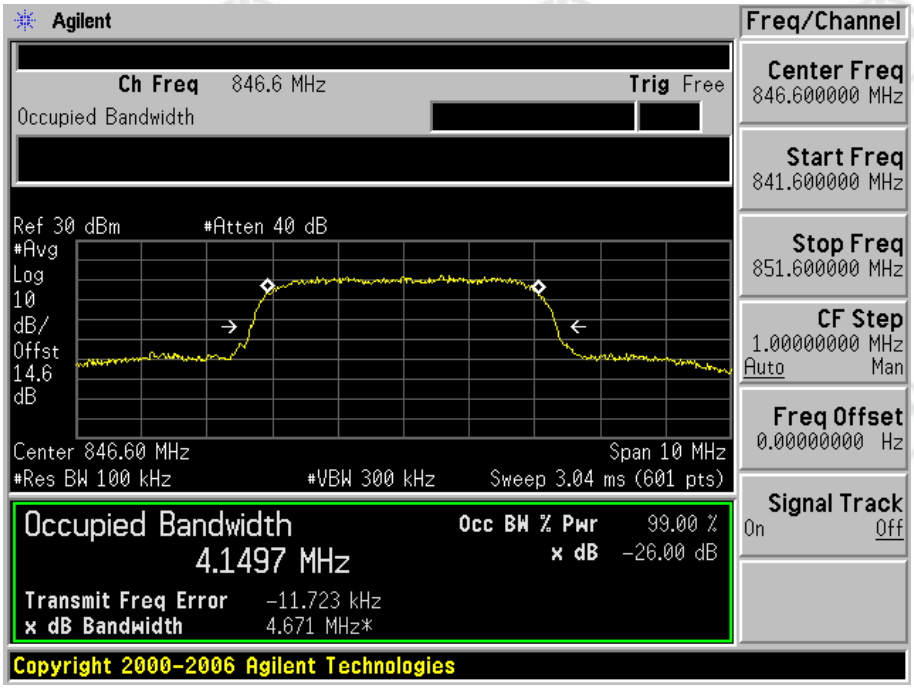
Test Channel=LCH



Test Channel=MCH

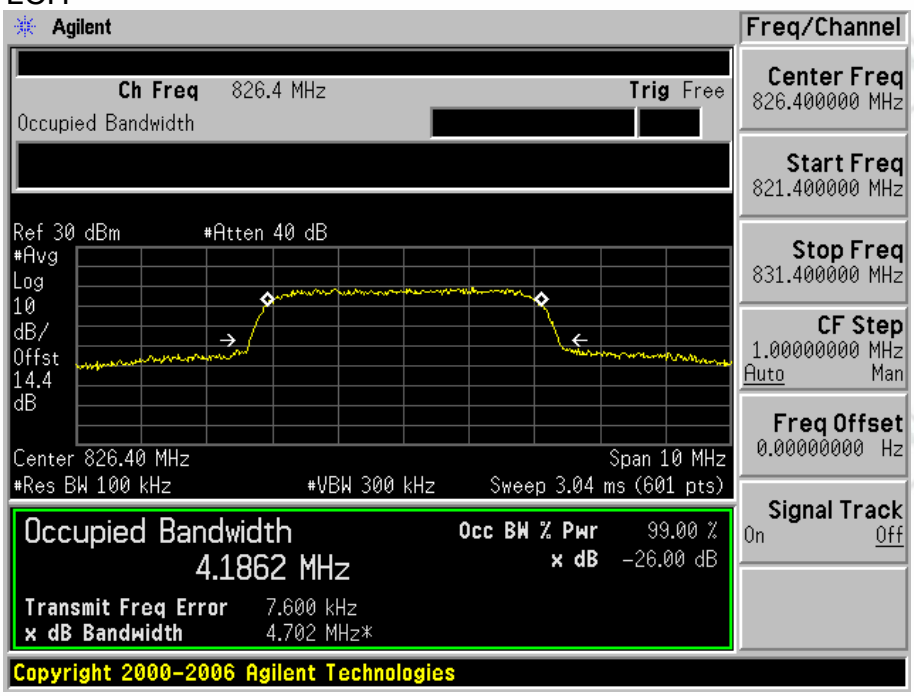


Test Channel=HCH

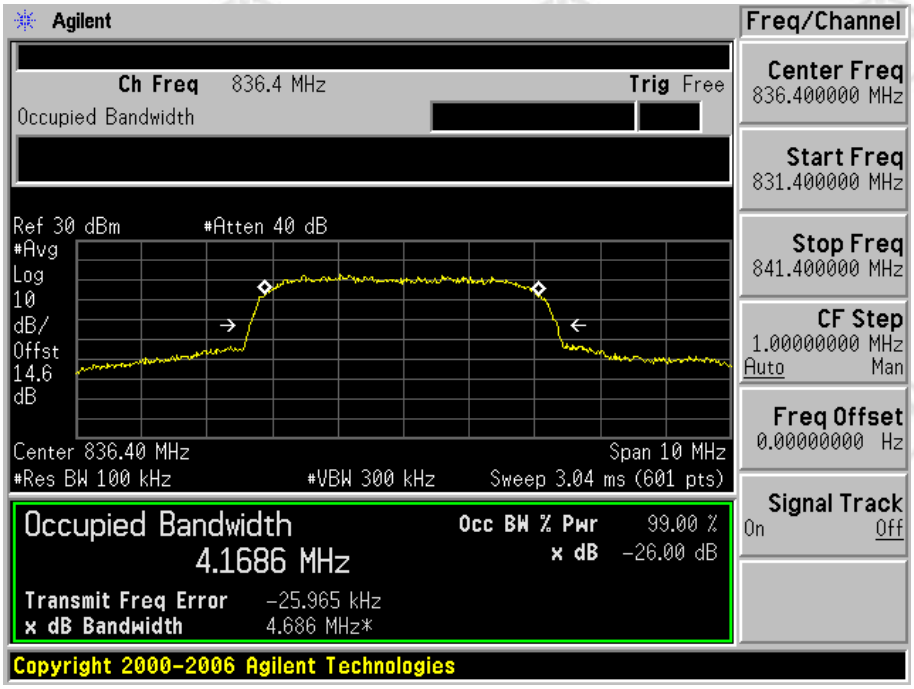


Test Mode=UMTS/TM3

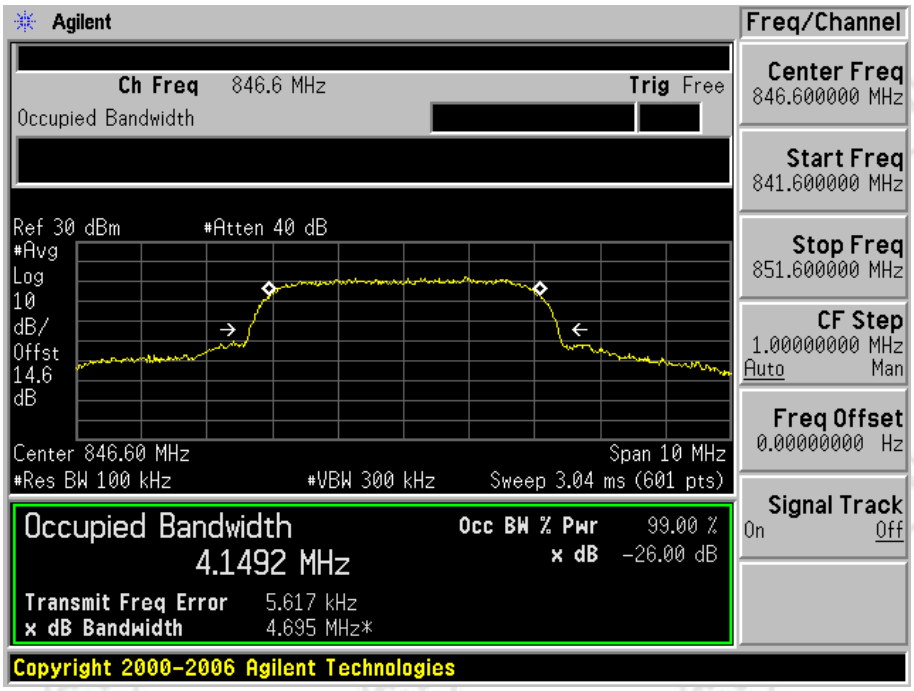
Test Channel=LCH



Test Channel=MCH



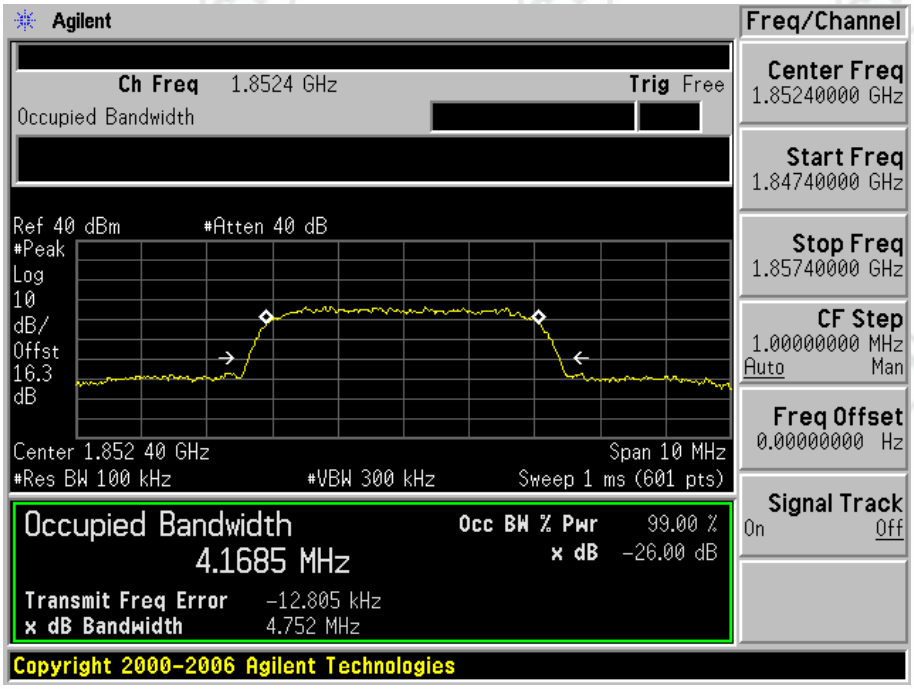
Test Channel=HCH



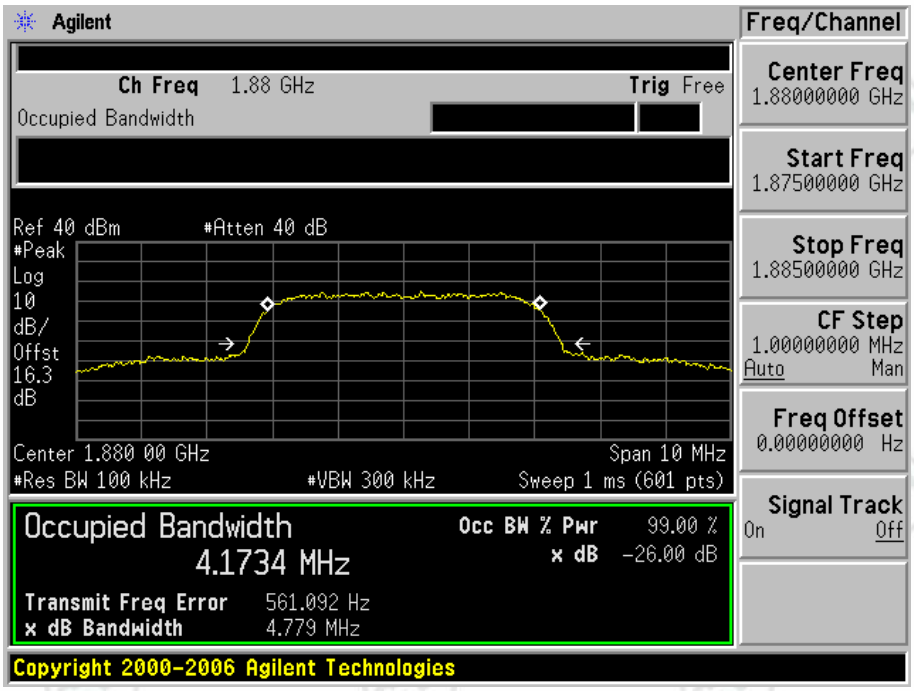
Test Band=WCDMA1900

Test Mode=UMTS/TM1

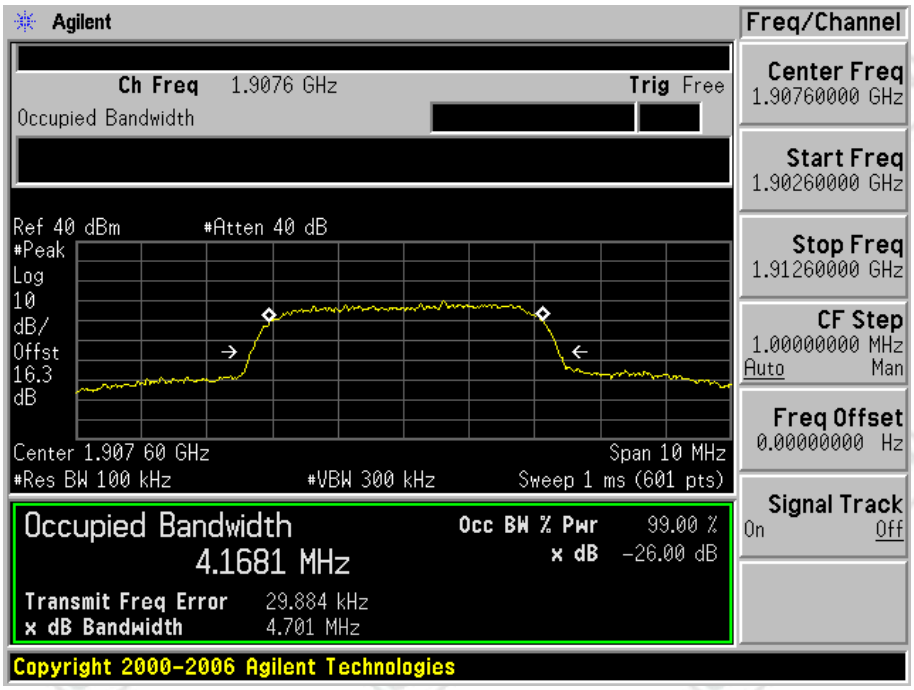
Test Channel=LCH



Test Channel=MCH

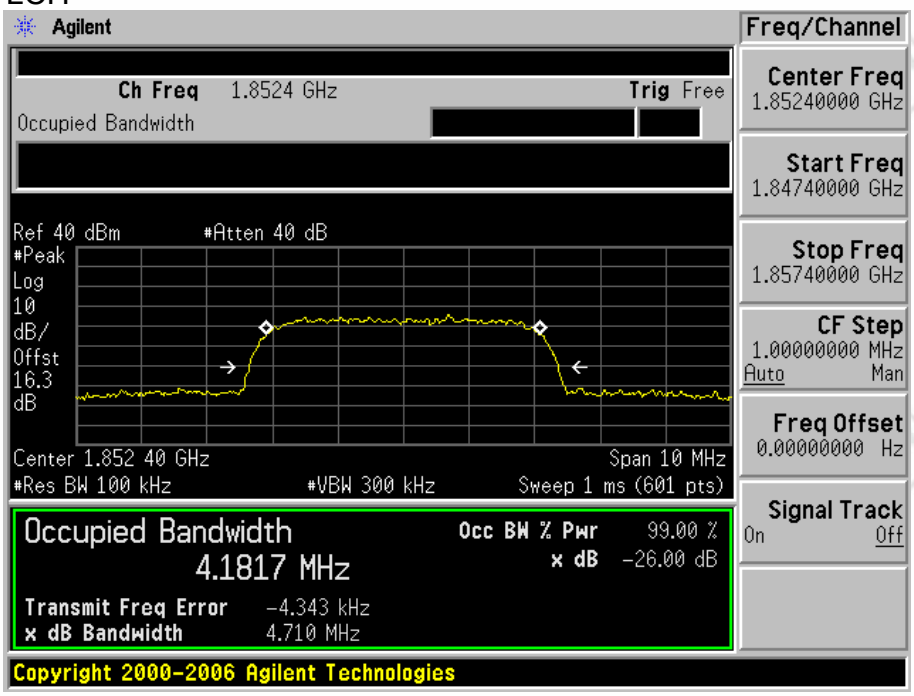


Test Channel=HCH

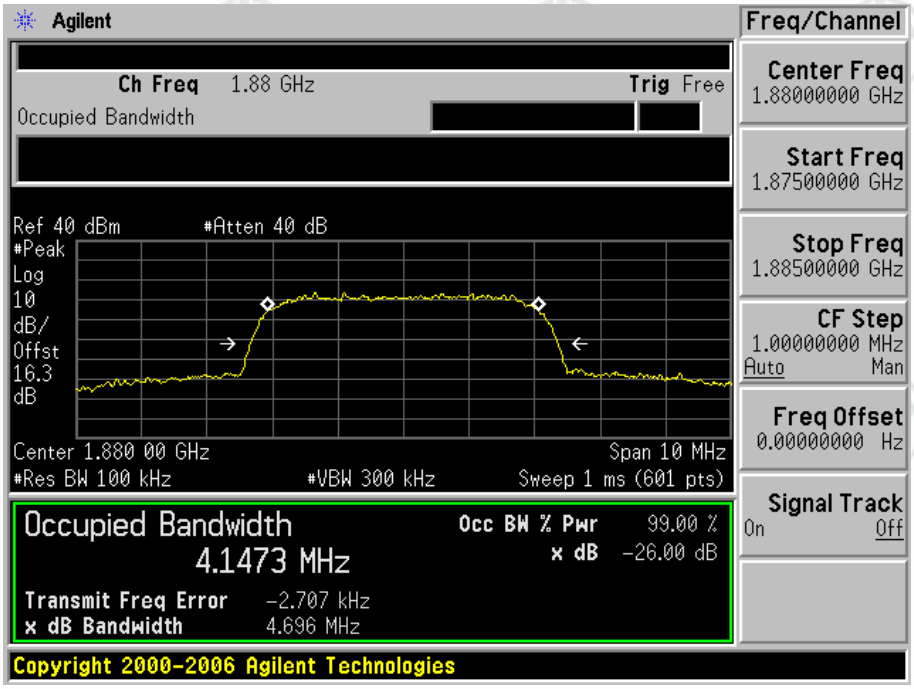


Test Mode=UMTS/TM2

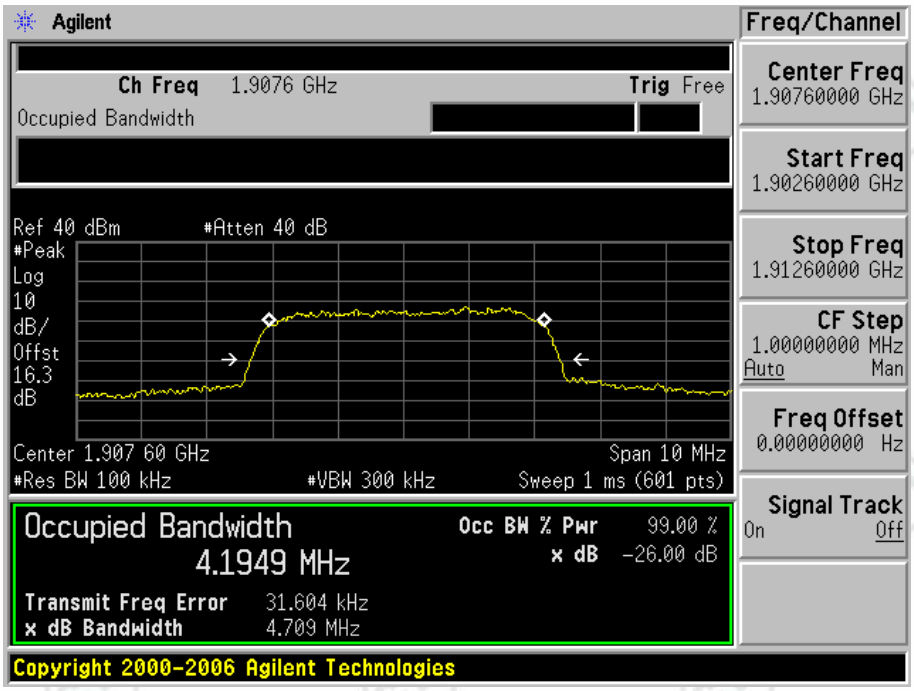
Test Channel=LCH



Test Channel=MCH

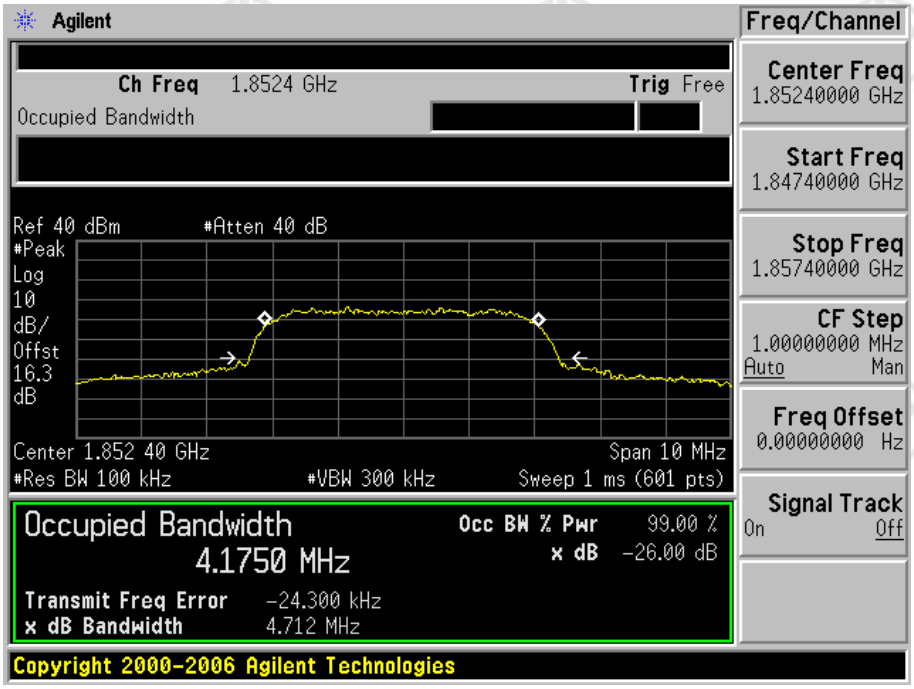


Test Channel=HCH

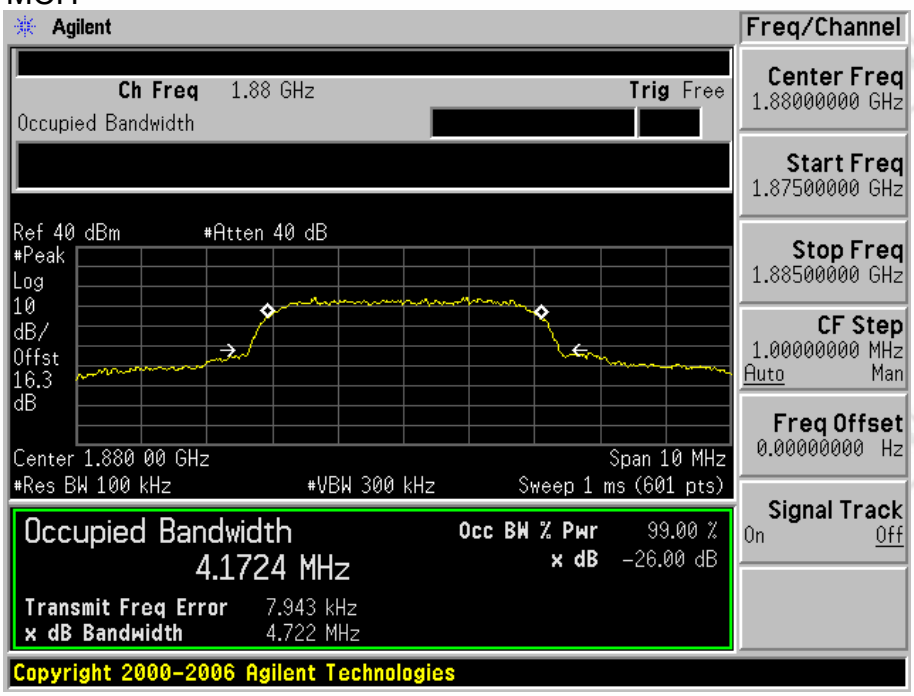


Test Mode=UMTS/TM3

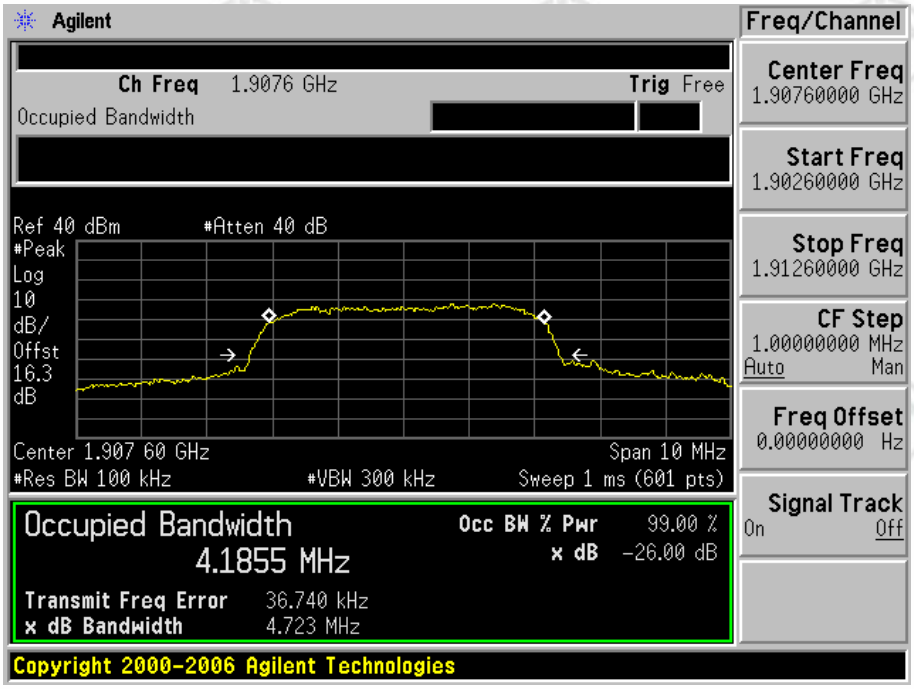
Test Channel=LCH



Test Channel=MCH



Test Channel=HCH



Appendix D): Band Edges Compliance

Test Requirement:	Part 2.1051
Test Method:	Part 22.917(b)/Part 24.238(b)
Test Setup:	Refer to section 5 for details
Measurement Procedure:	The transmitter output was connected to a calibrated coaxial cable, attenuator and Spectrum analyser, the other end of which was connected to a Base Station Simulator. The Base Station Simulator was set to force the EUT to its maximum power setting. The tests were performed at three frequencies (low channel and high channel).in the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of 100kHz or 1% of the emission bandwidth of the fundamental emission of the transmitter may be employed. The EUT emission bandwidth is measured as the width of the signal between two points, outside of which all emission are attenuated at least 26dB below the transmitter power. The video bandwidth of the spectrum analyzer was set at thrice the resolution bandwidth. Detector Mode was set to peak or peak hold power.
Limit:	

Operation Band	Frequency Range (MHz)	Limit
GPRS/ WCDMA 850	Below 824 and above 849	Attenuated at least 43+10log(P)
GPRS/ WCDMA 1900	Below 1850 and above 1910	Attenuated at least 43+10log(P)

Instruments Used:	Refer to section 7 for details
Test Results:	Pass

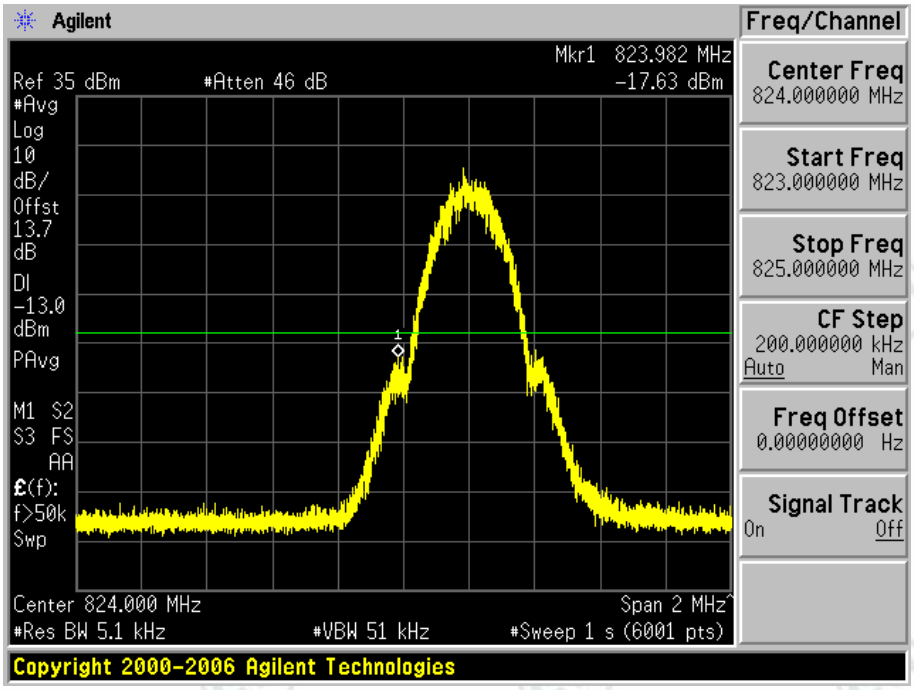
Test result:

For GSM

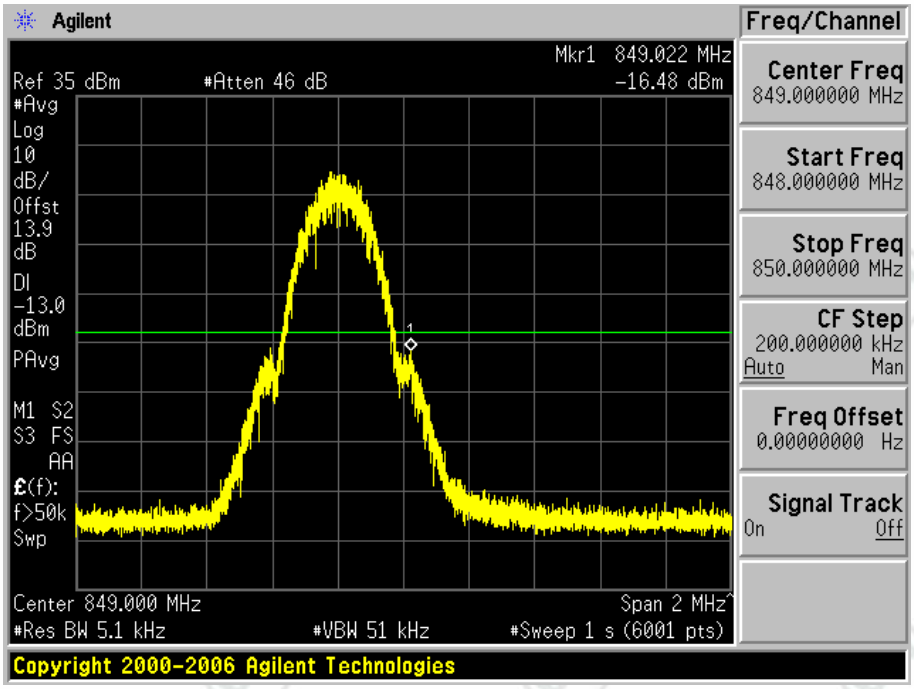
Test Band=GSM850

1.1.1 Test Mode=GSM/TM2

1.1.1.1 Test Channel=LCH



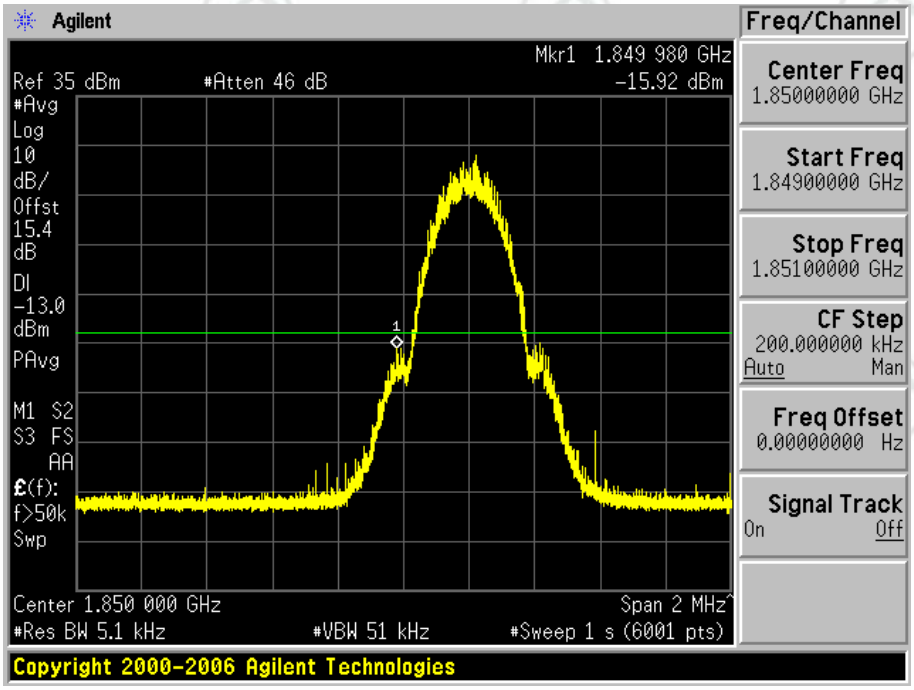
1.1.1.2 Test Channel=HCH



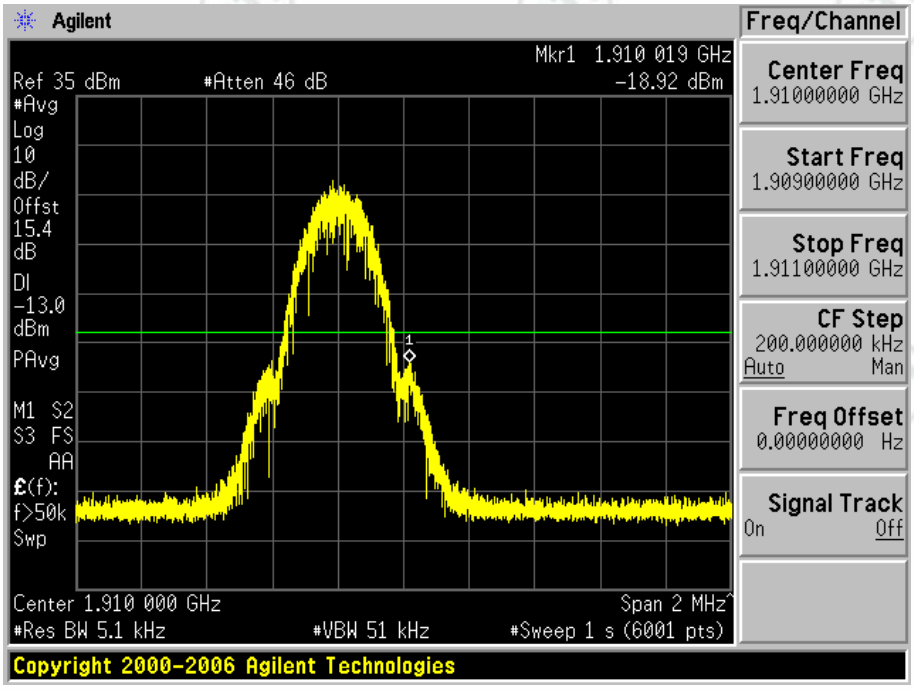
1.2 Test Band=GSM1900

1.2.1 Test Mode=GSM/TM2

1.2.1.1 Test Channel=LCH



1.2.1.2 Test Channel=HCH

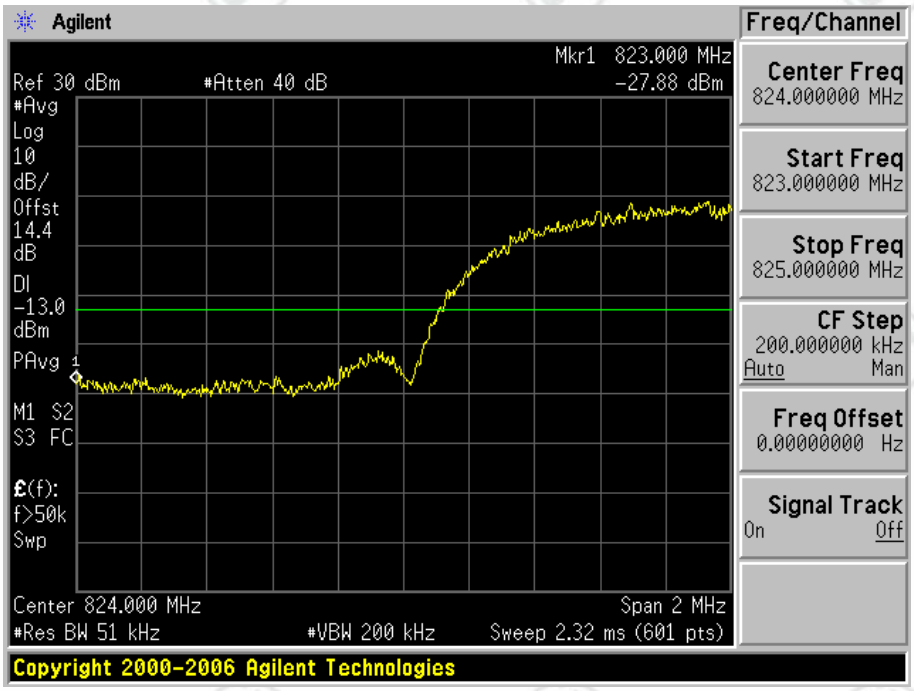


2 For WCDMA

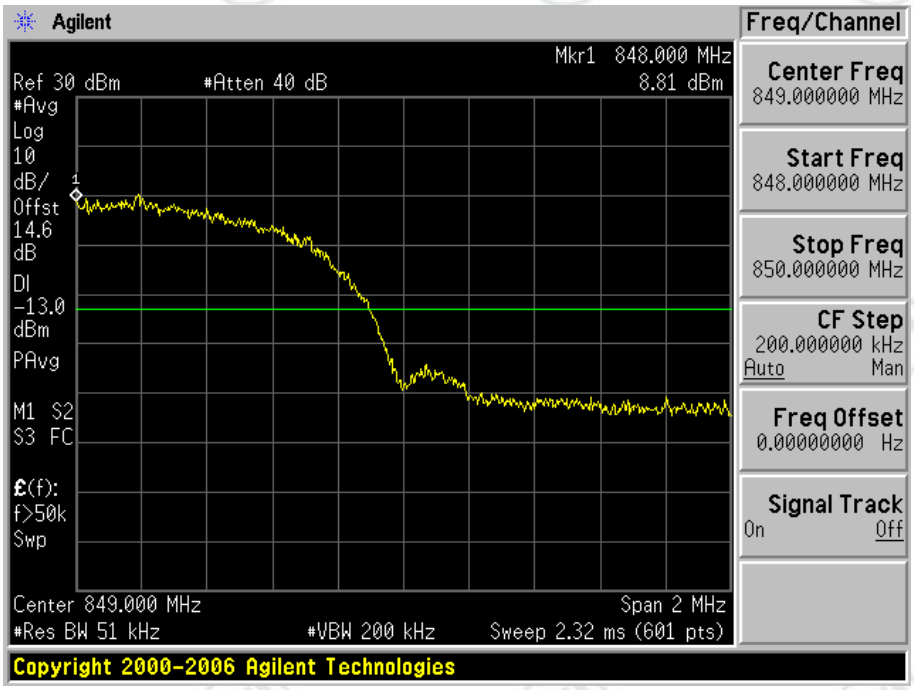
2.1 Test Band=WCDMA850

2.1.1 Test Mode=UMTS/TM1

2.1.1.1 Test Channel=LCH

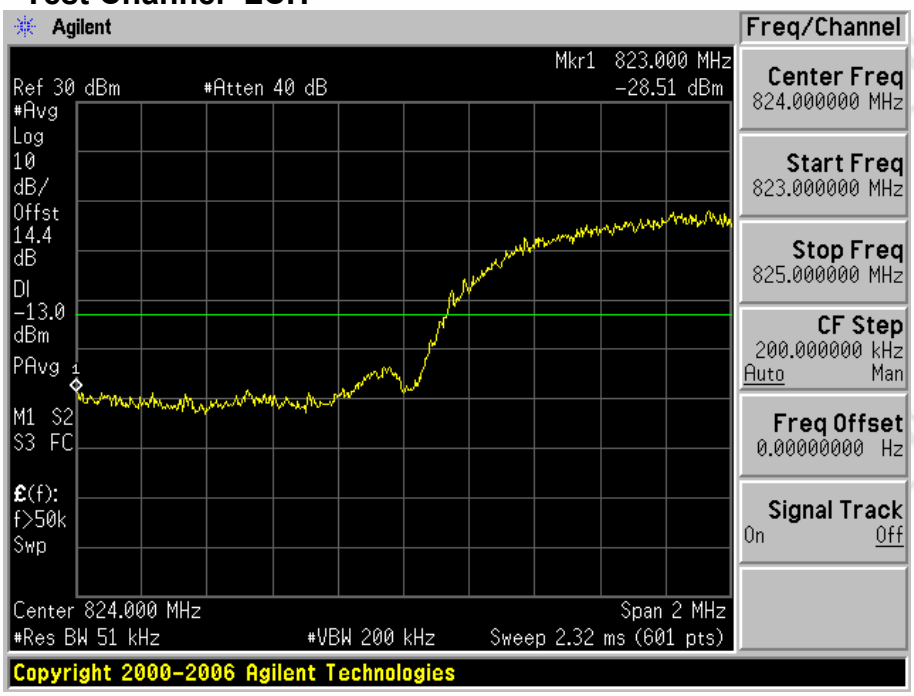


2.1.1.2 Test Channel=HCH

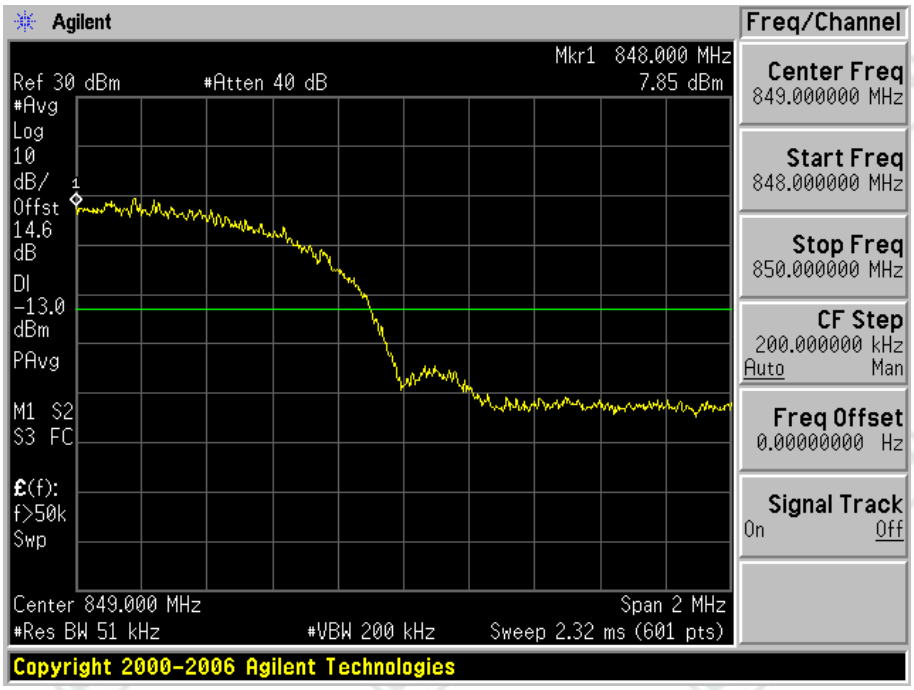


2.1.2 Test Mode=UMTS/TM2

2.1.2.1 Test Channel=LCH

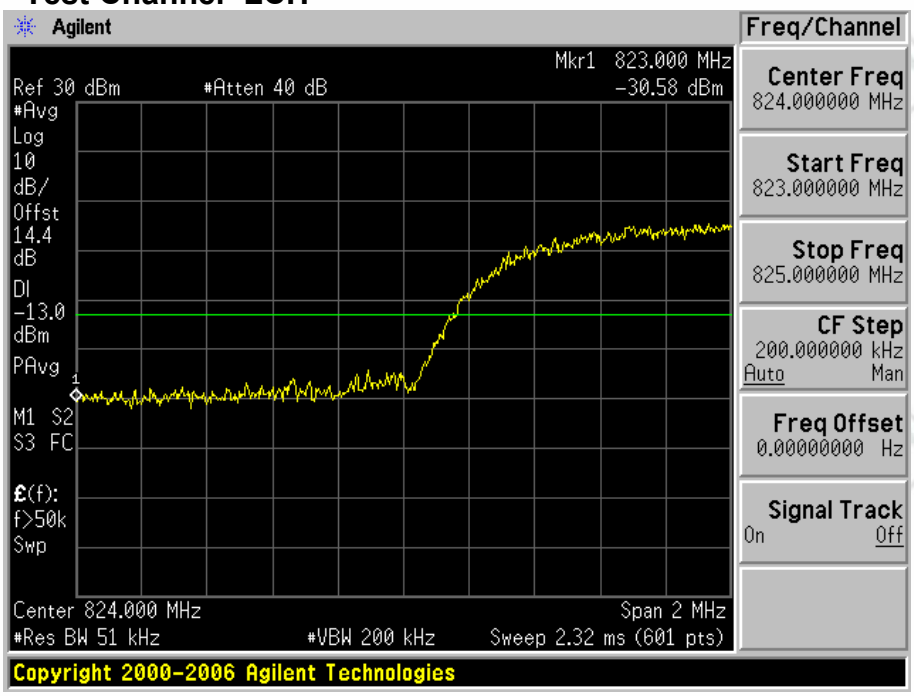


2.1.2.2 Test Channel=HCH

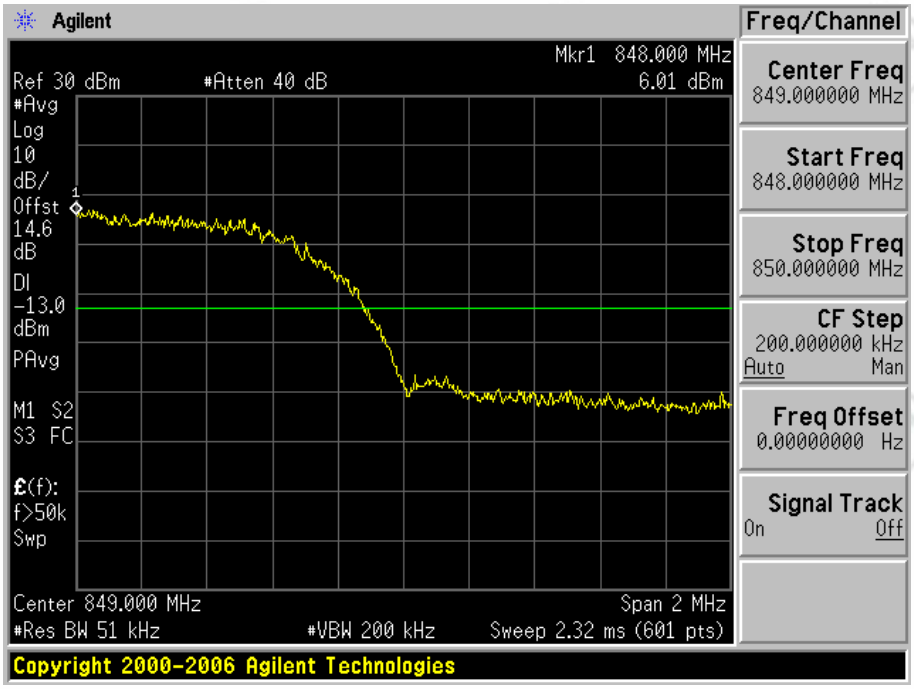


2.1.3 Test Mode=UMTS/TM3

2.1.3.1 Test Channel=LCH



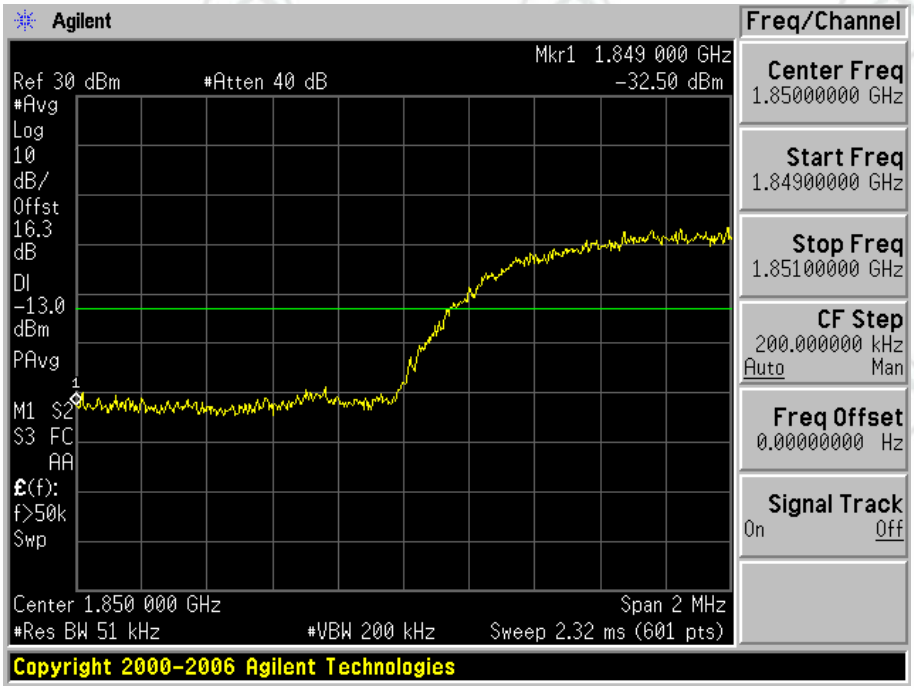
2.1.3.2 Test Channel=HCH



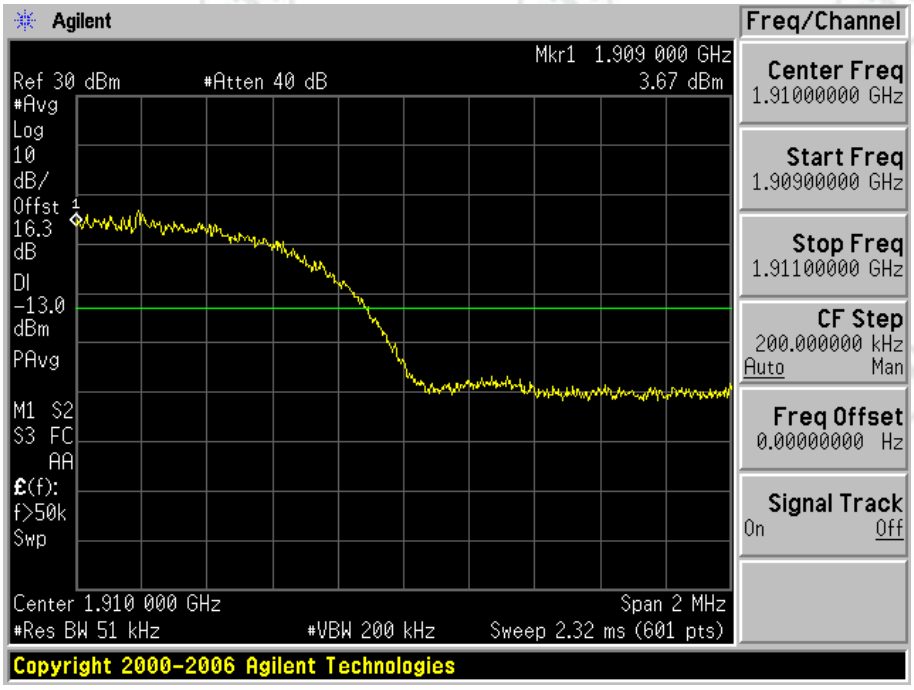
2.2 Test Band=WCDMA1900

2.2.1 Test Mode=UMTSTM1

2.2.1.1 Test Channel=LCH

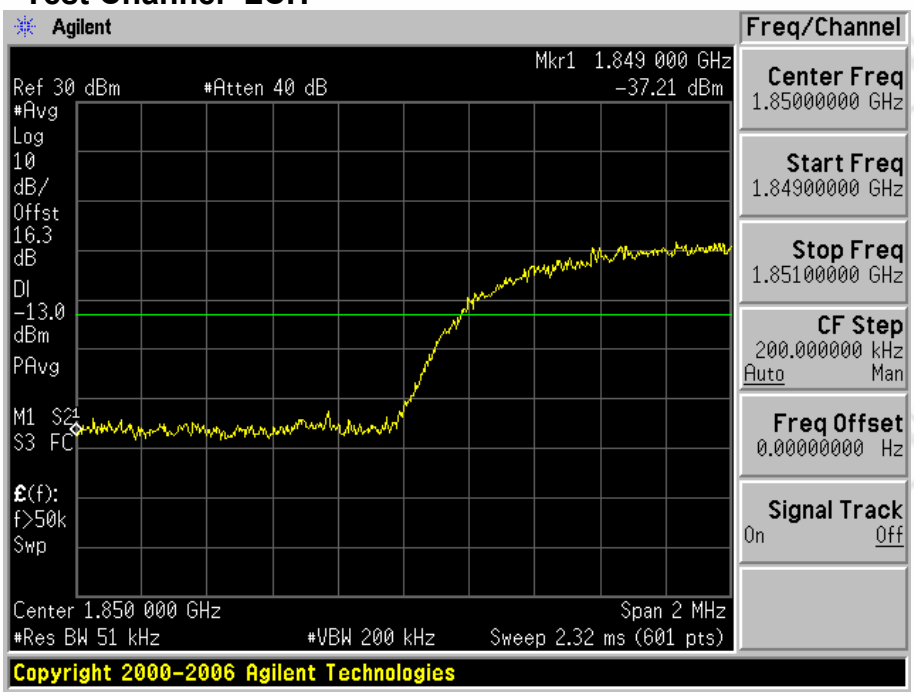


2.2.1.2 Test Channel=HCH

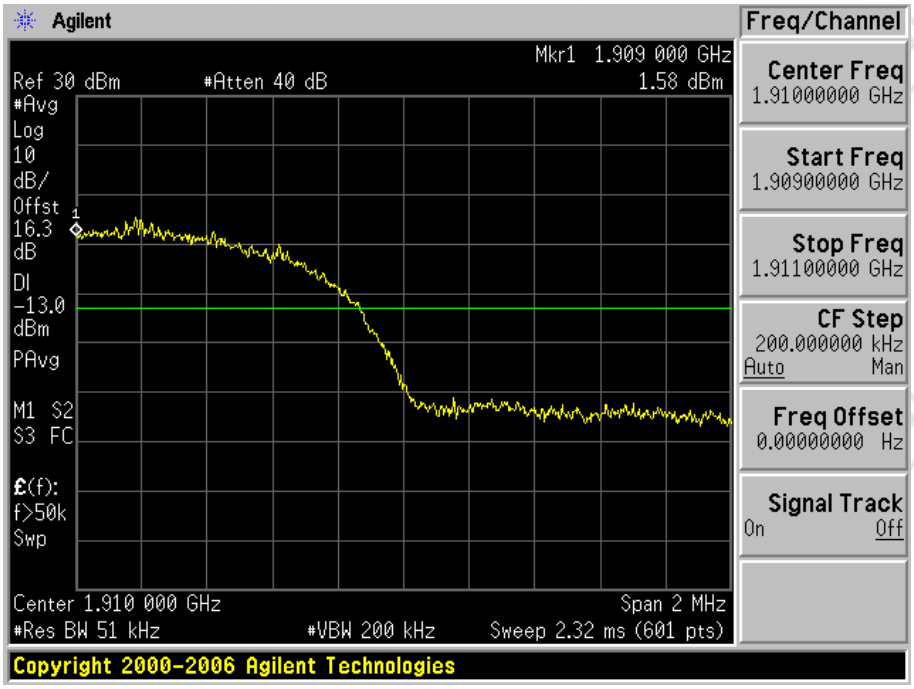


2.2.2 Test Mode=UMTS/TM2

2.2.2.1 Test Channel=LCH

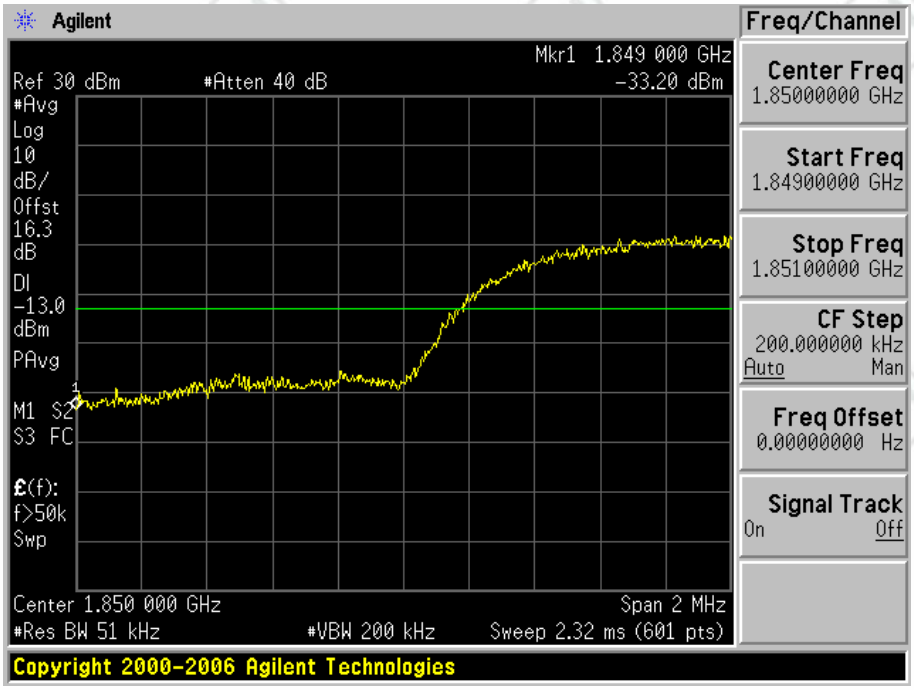


2.2.2.2 Test Channel=HCH

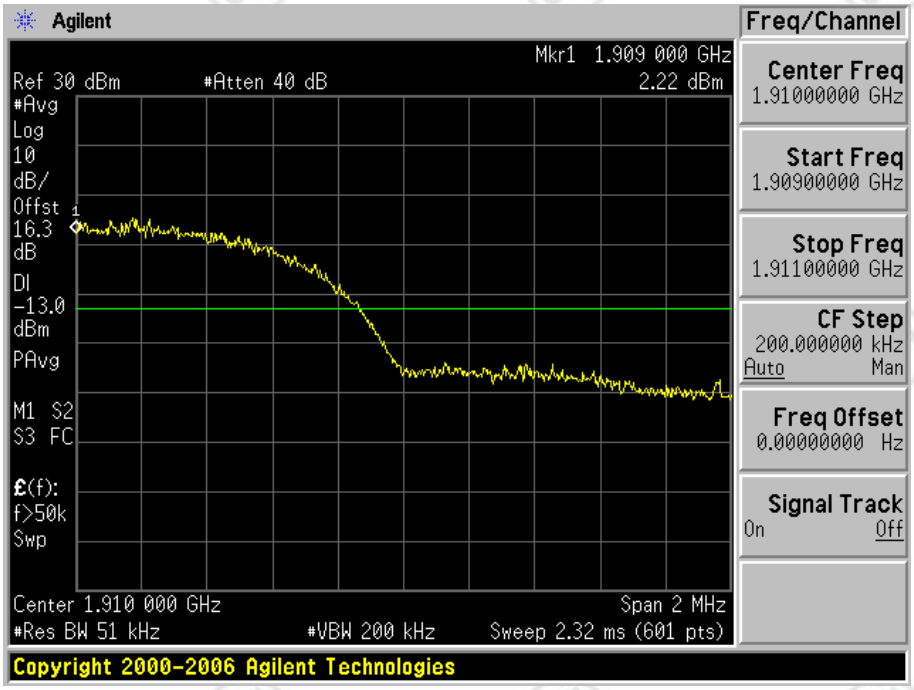


2.2.3 Test Mode=UMTS/TM3

2.2.3.1 Test Channel=LCH



2.2.3.2 Test Channel=HCH



Appendix E): Spurious Emission at Antenna Terminal

Test Requirement:	Part 2.1051/Part 2.1057
Test Method:	TIA-603-E-2016 Clause 2.2.13
Test Setup:	Refer to section 5 for details
Measurement Procedure:	The transmitter output was connected to a calibrated coaxial cable, attenuator and Spectrum analyzer, the other end of which was connected to a Base Station Simulator. The Base Station Simulator was set to force the EUT to its maximum power setting. The tests were performed at three frequencies (low channel and high channel).the equipment operates below 10GHz: to the tenth harmonic of the highest fundamental frequency or to 40GHz.whichever is lower, the resolution bandwidth of the spectrum analyzer was set at 100kHz for spurious emissions below 1 GHz, and 1 MHz for spurious emissions above 1GHz.the video bandwidth of the spectrum analyzer was set at thrice the resolution bandwidth. Detector Mode was set to mean or average power.
Instruments Used:	Refer to section 7 for details
Limit:	Attenuated at least 43+10log(P)
Test Results:	Pass

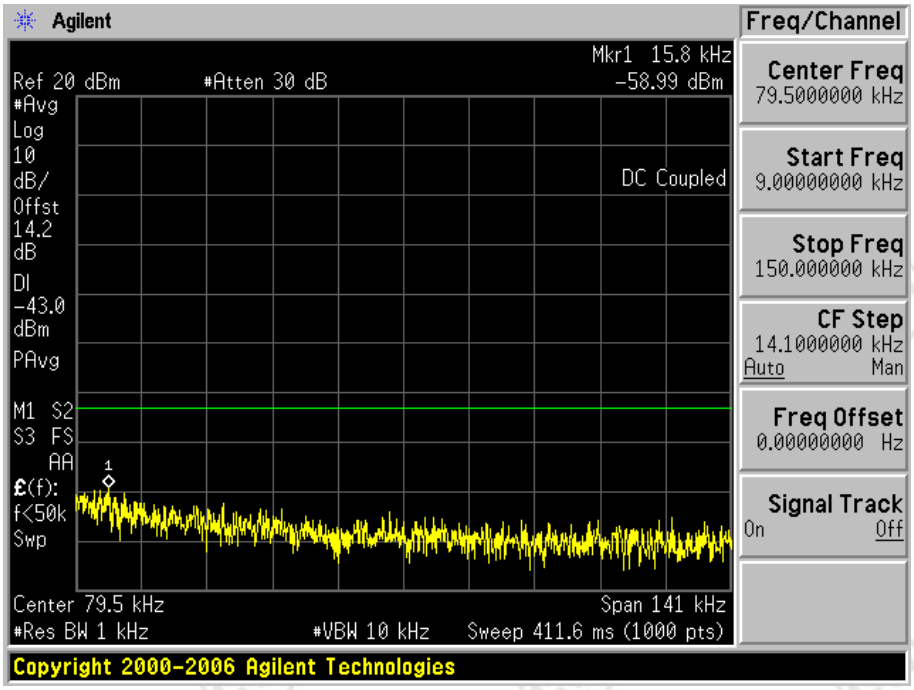
Test result:

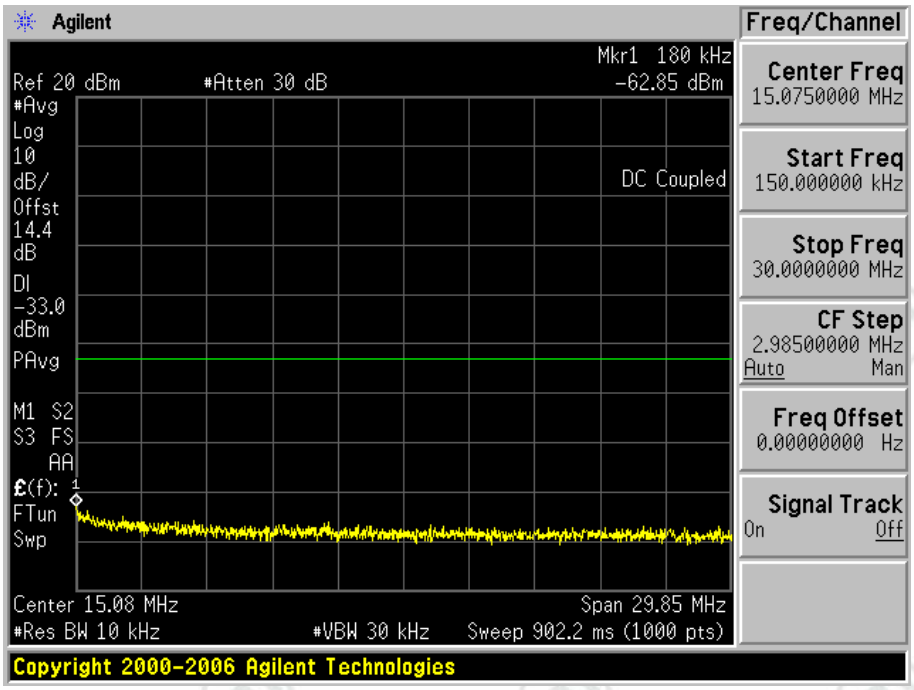
1 For GSM

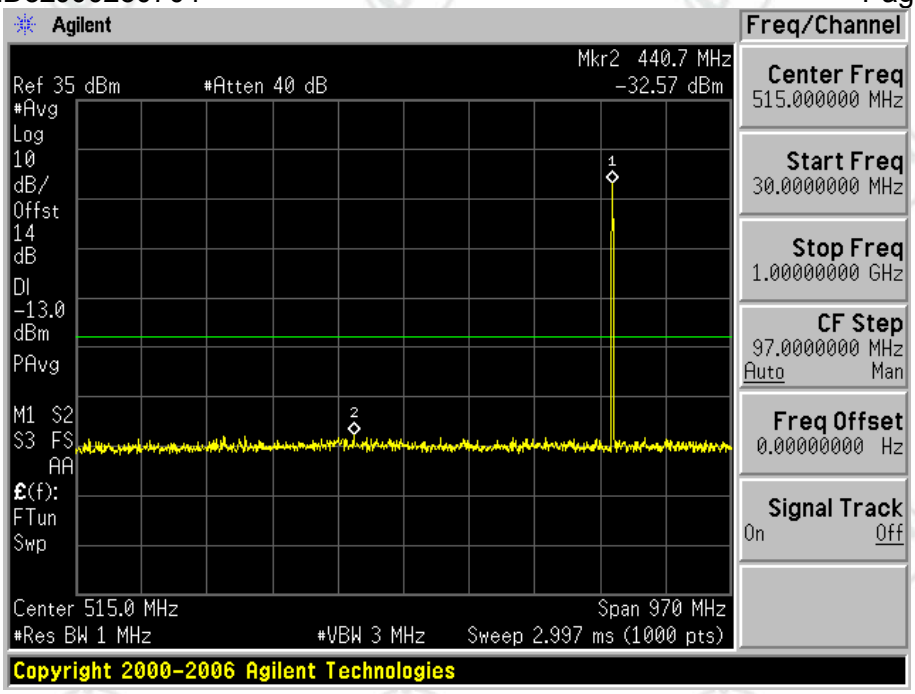
1.1 Test Band=GSM850

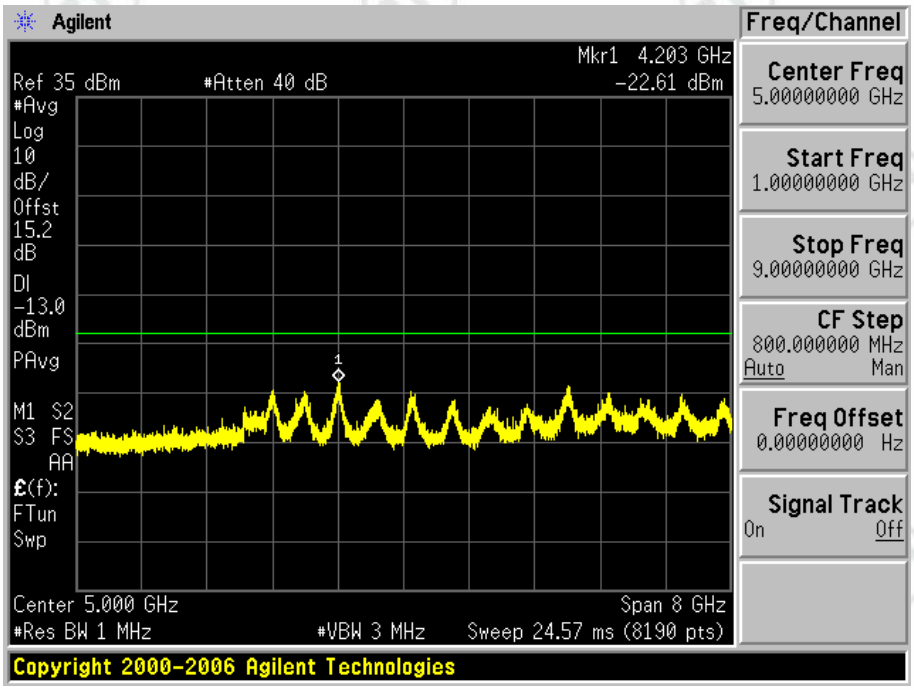
1.1.1 Test Mode=GSM/TM2

1.1.1.1 Test Channel=LCH

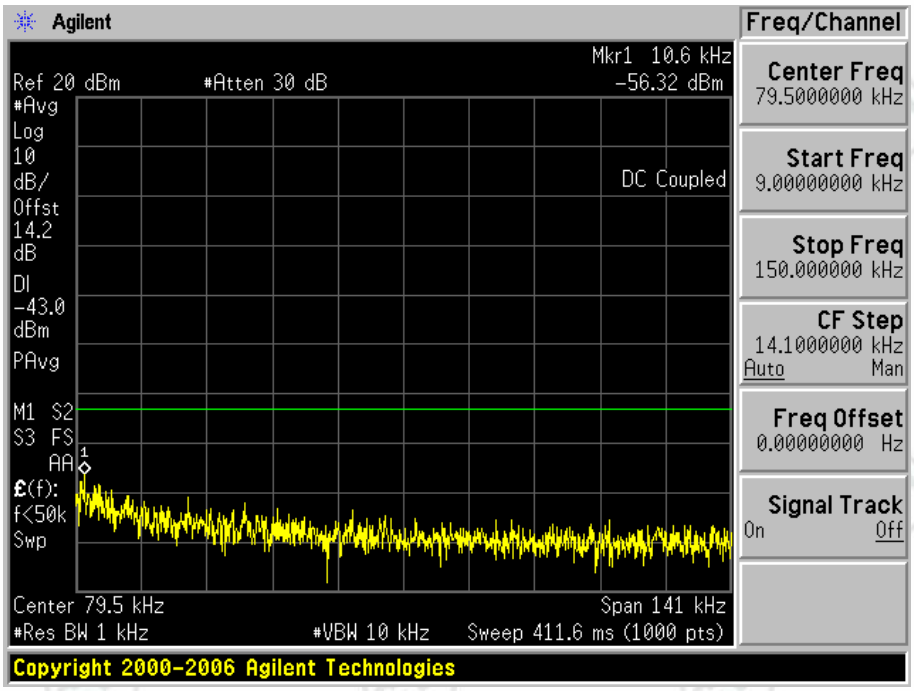


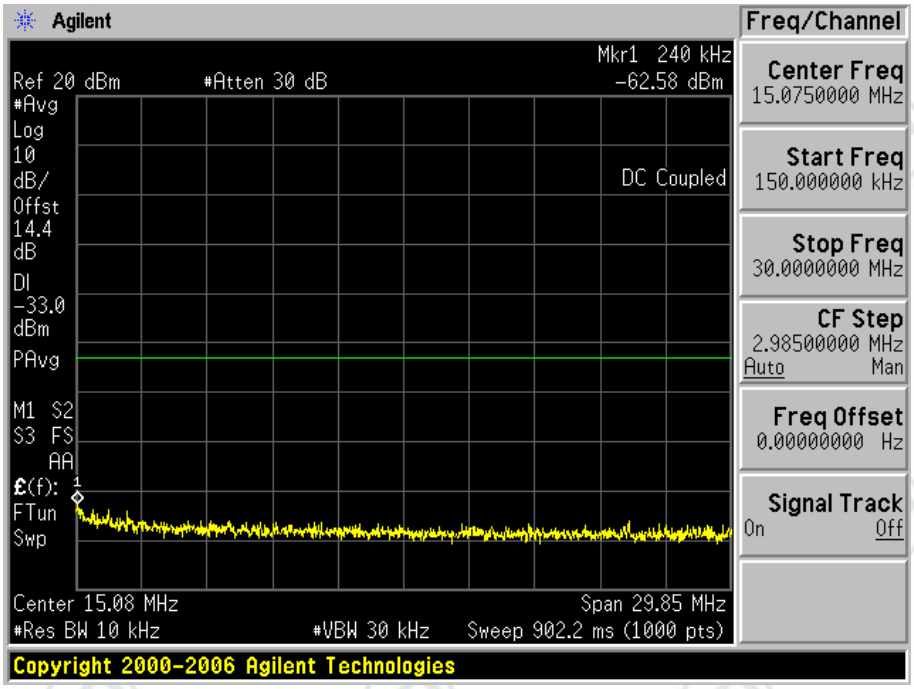


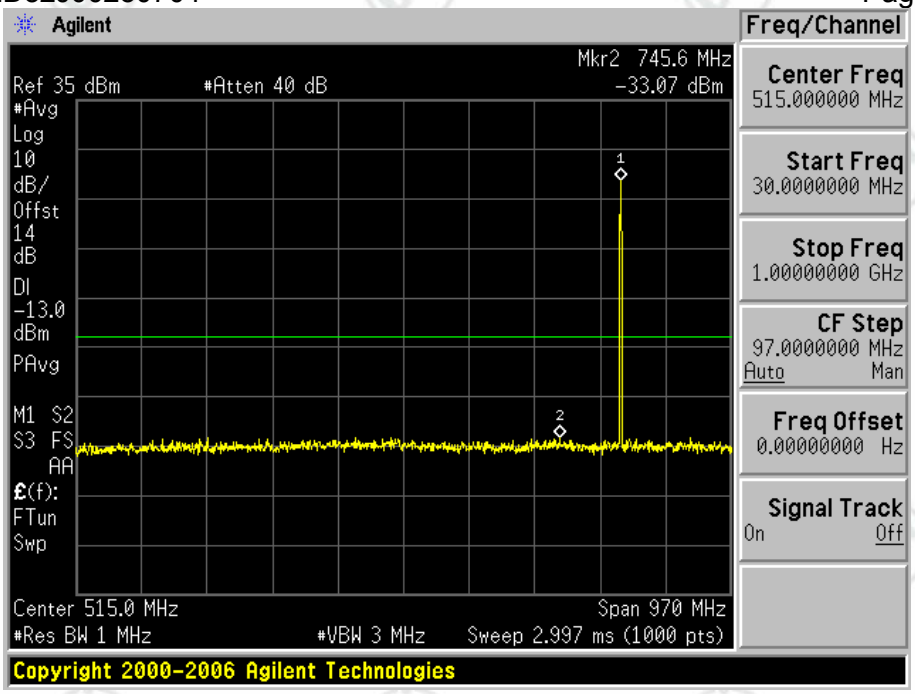

Agilent
Freq/Channel
Mkr2 440.7 MHz
Ref 35 dBm
#Atten 40 dB
-32.57 dBm
#Avg
Log
10
dB/
Offst
14
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Copyright 2000-2006 Agilent Technologies

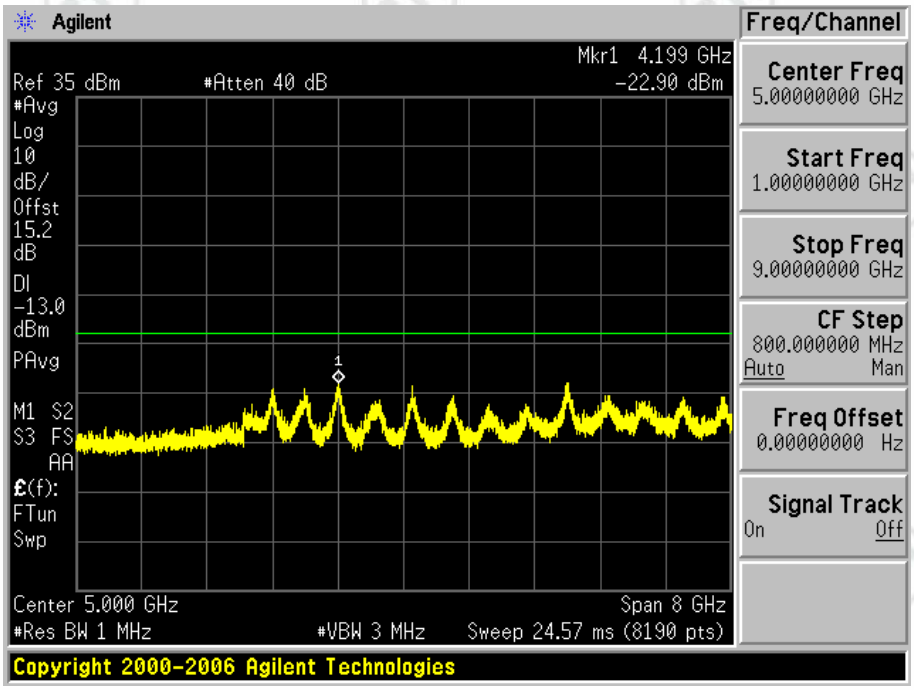

Agilent
Freq/Channel
Mkr1 4.203 GHz
Ref 35 dBm
#Atten 40 dB
-22.61 dBm
#Avg
Log
10
dB/
Offst
15.2
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center Freq
5.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
9.00000000 GHz
CF Step
800.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.57 ms (8190 pts)
Copyright 2000-2006 Agilent Technologies

1.1.1.2 Test Channel=MCH

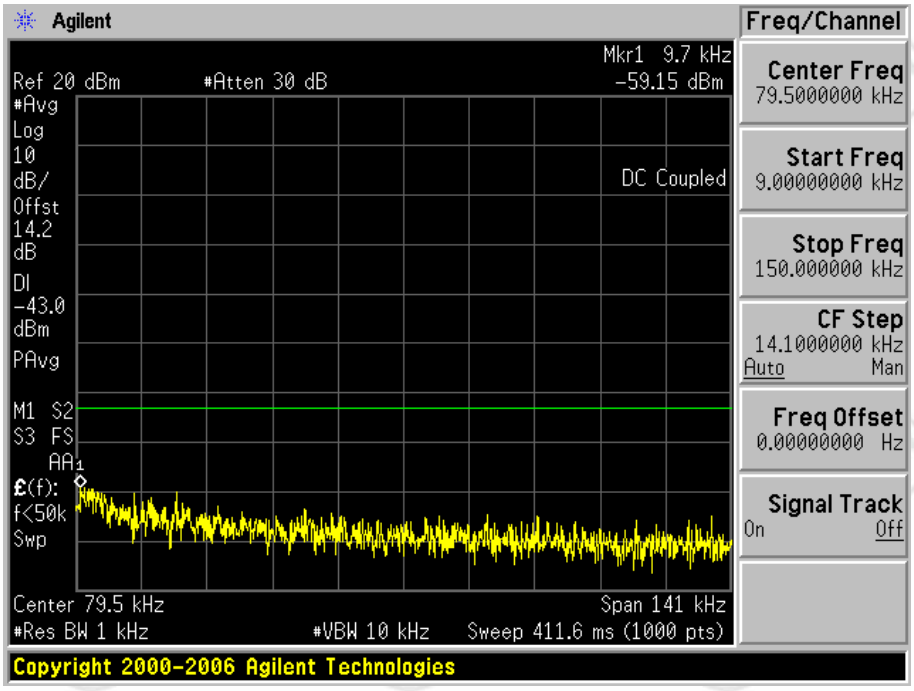


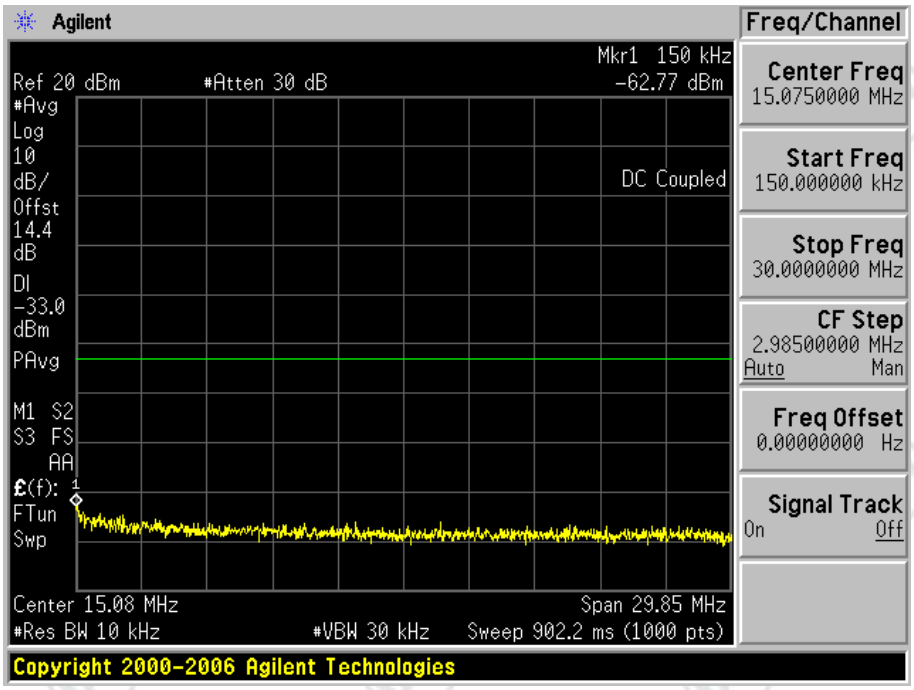


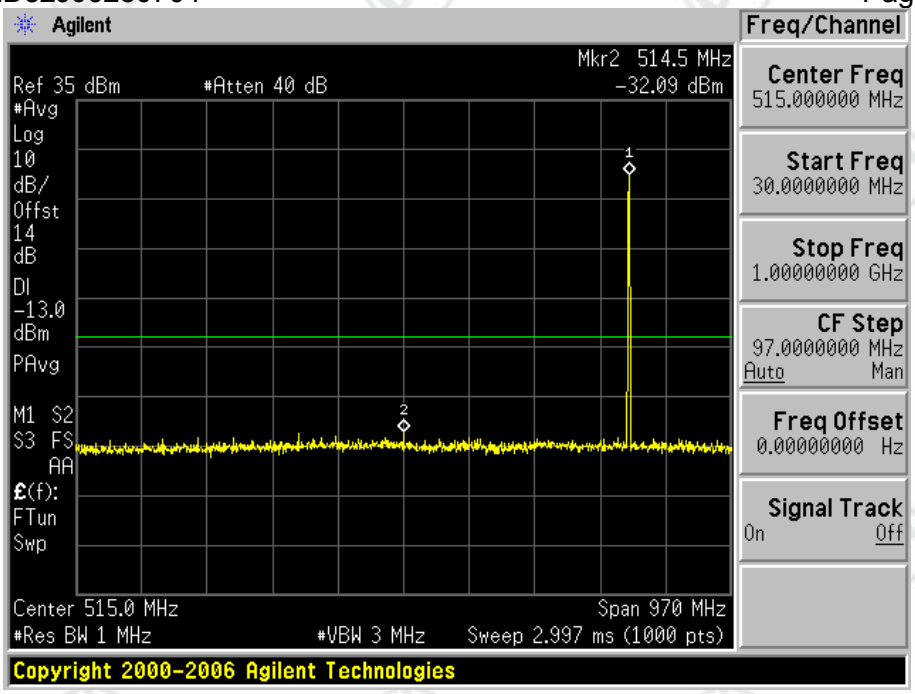

Agilent
Freq/Channel
Mkr2 745.6 MHz
Ref 35 dBm
#Atten 40 dB
-33.07 dBm
#Avg
Log
10
dB/
Offst
14
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Copyright 2000-2006 Agilent Technologies

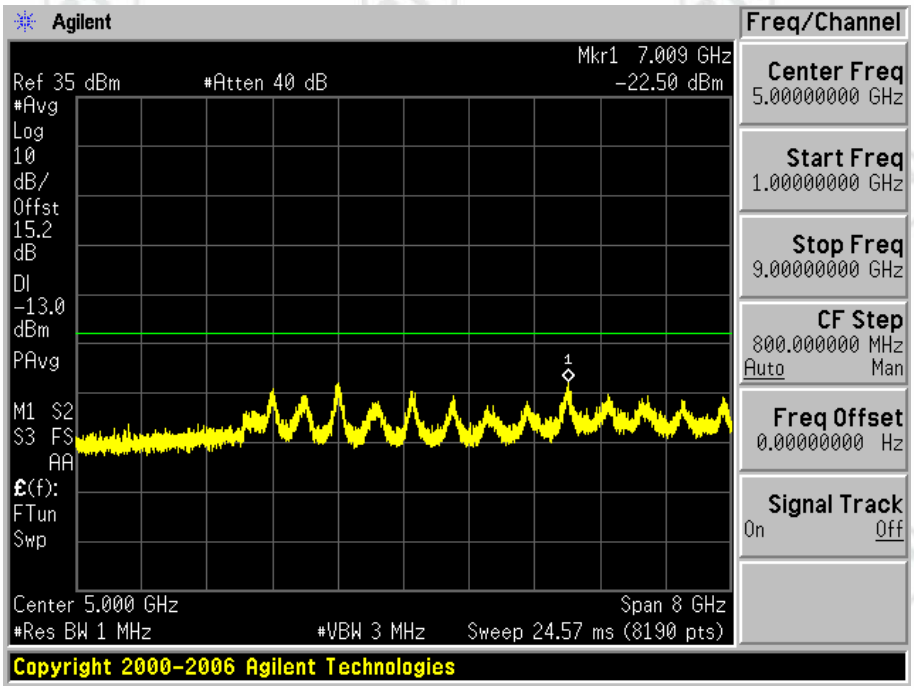

Agilent
Freq/Channel
Mkr1 4.199 GHz
Ref 35 dBm
#Atten 40 dB
-22.90 dBm
#Avg
Log
10
dB/
Offst
15.2
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center Freq
5.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
9.00000000 GHz
CF Step
800.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.57 ms (8190 pts)
Copyright 2000-2006 Agilent Technologies

1.1.1.3 Test Channel=HCH





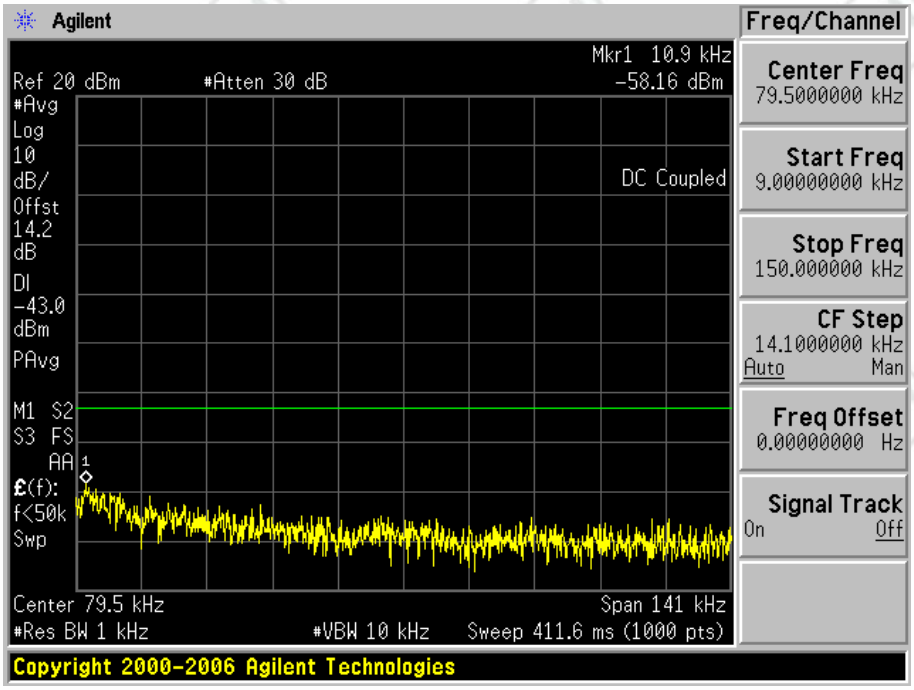

Agilent
Freq/Channel
Mkr2 514.5 MHz
Ref 35 dBm
#Atten 40 dB
-32.09 dBm
#Avg
Log
10
dB/
Offst
14
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Copyright 2000-2006 Agilent Technologies

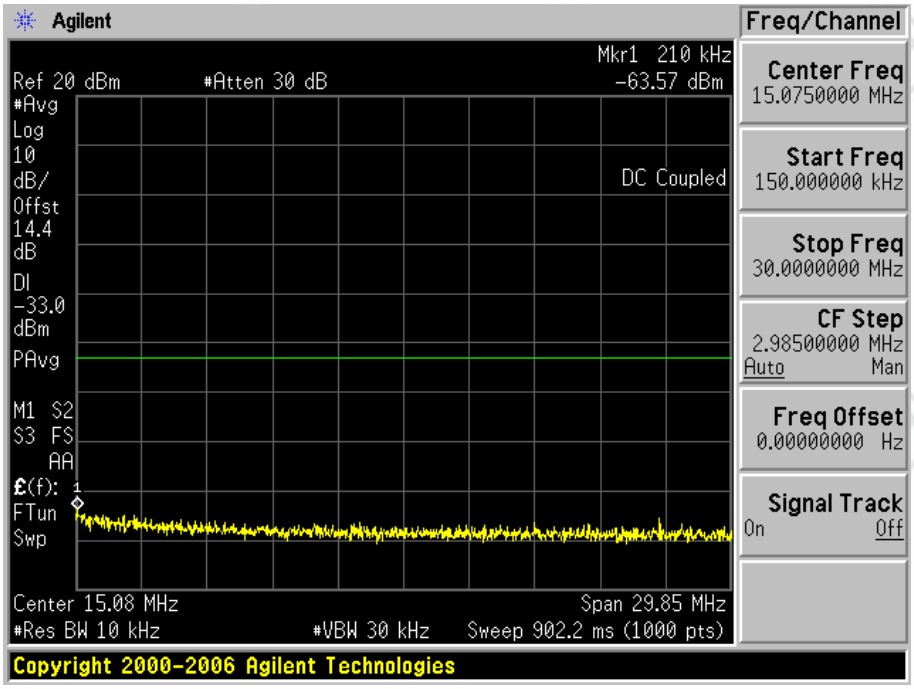

Agilent
Freq/Channel
Mkr1 7.009 GHz
Ref 35 dBm
#Atten 40 dB
-22.50 dBm
#Avg
Log
10
dB/
Offst
15.2
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.57 ms (8190 pts)
Center Freq
5.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
9.00000000 GHz
CF Step
800.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Copyright 2000-2006 Agilent Technologies

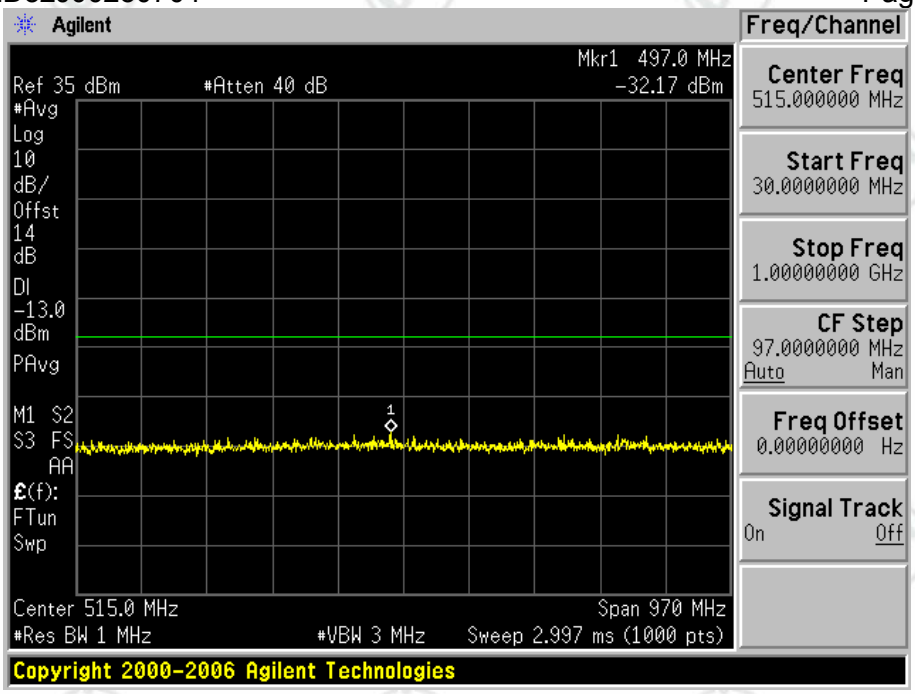
Test Band=GSM1900

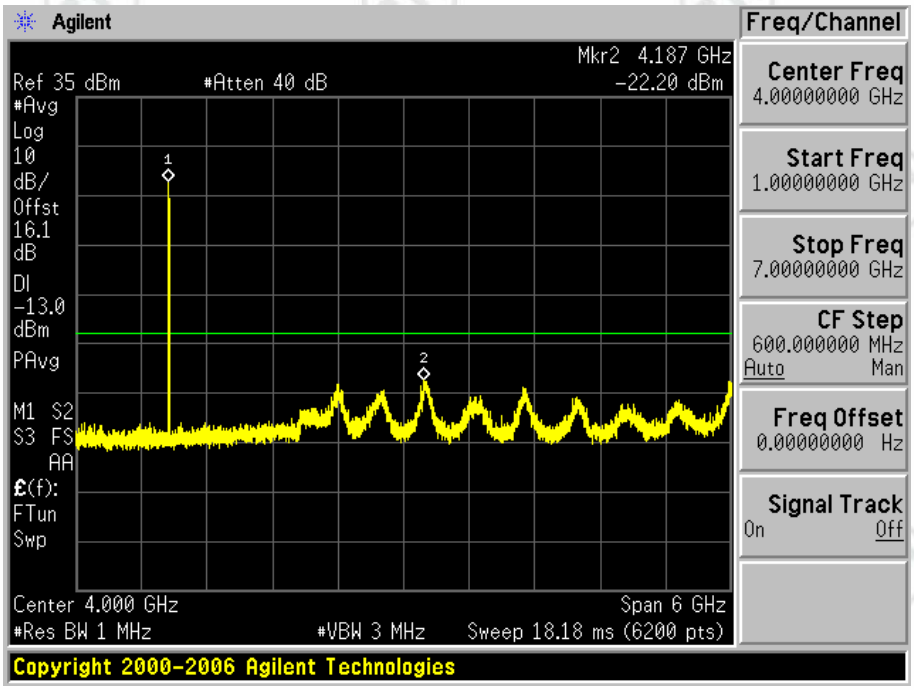
1.1.2 Test Mode=GSM/TM2

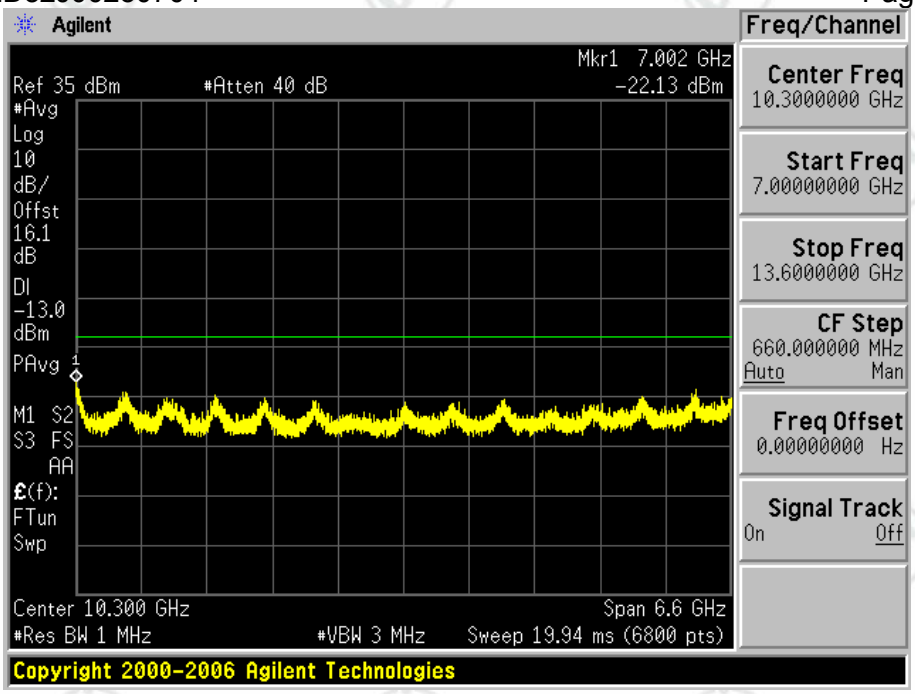
1.1.2.1 Test Channel=LCH

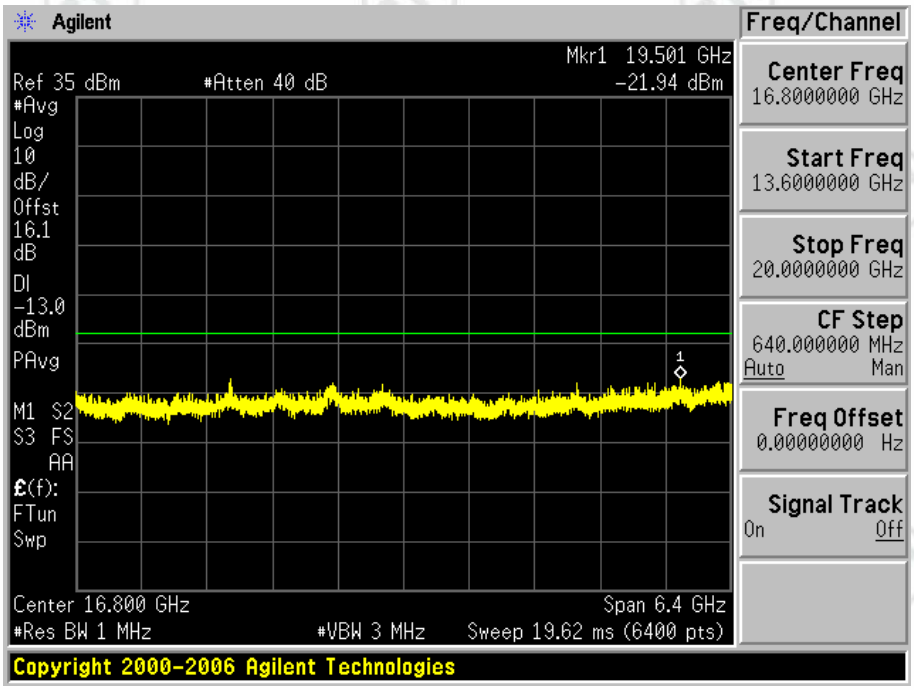




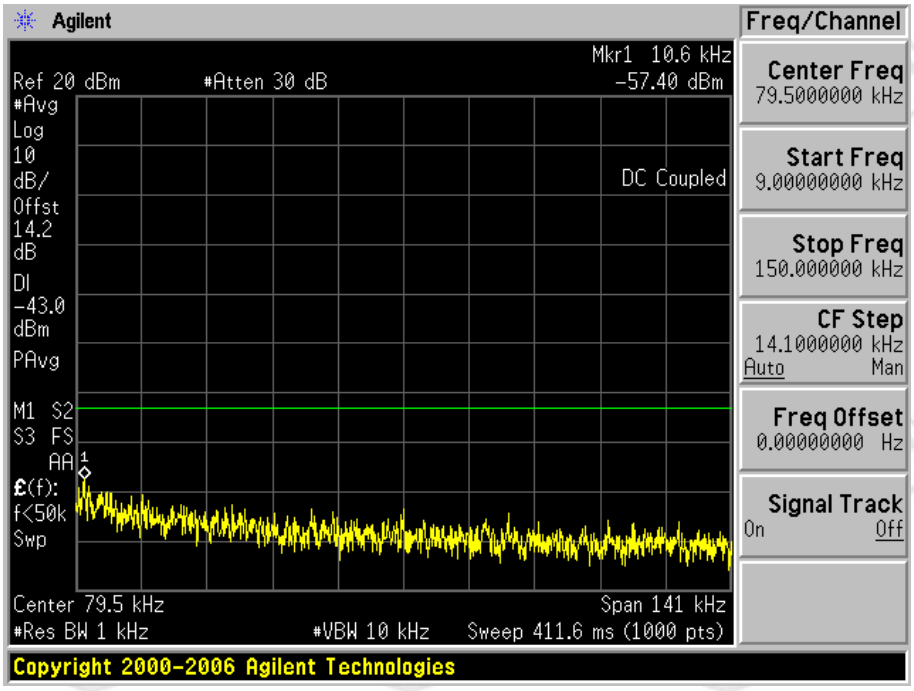

Agilent
Freq/Channel
Mkr1 497.0 MHz
Ref 35 dBm
#Atten 40 dB
-32.17 dBm
#Avg
Log
10
dB/
Offst
14
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

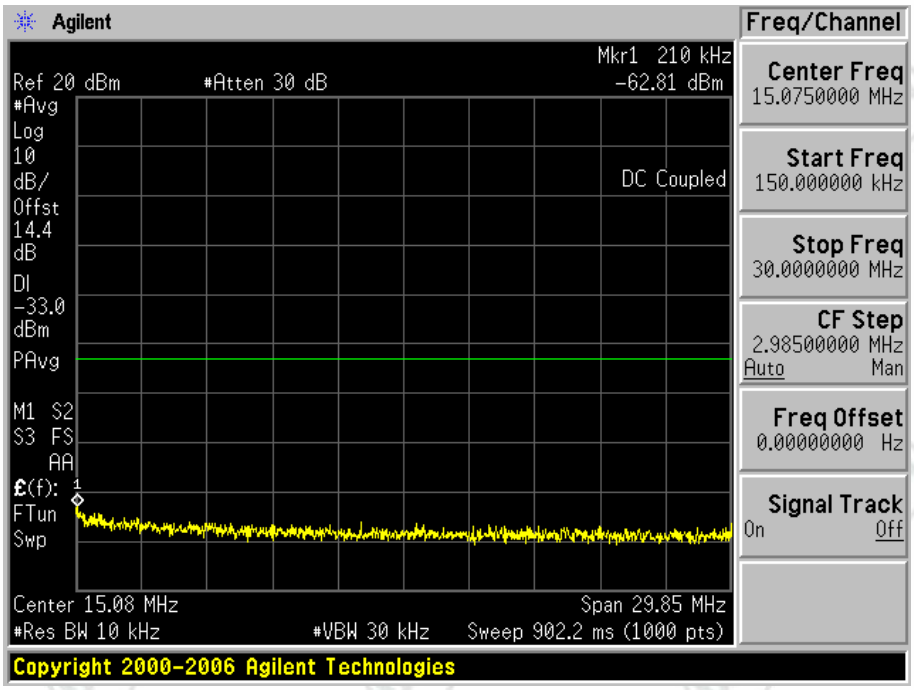

Agilent
Freq/Channel
Mkr2 4.187 GHz
Ref 35 dBm
#Atten 40 dB
-22.20 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

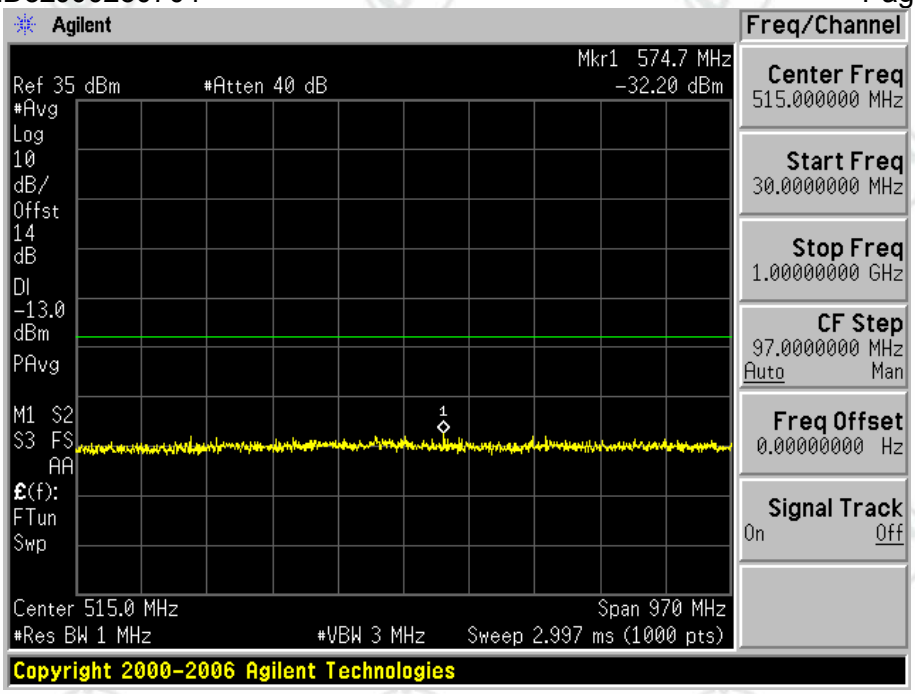

Agilent
Freq/Channel
Mkr1 7.002 GHz
Ref 35 dBm
#Atten 40 dB
-22.13 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

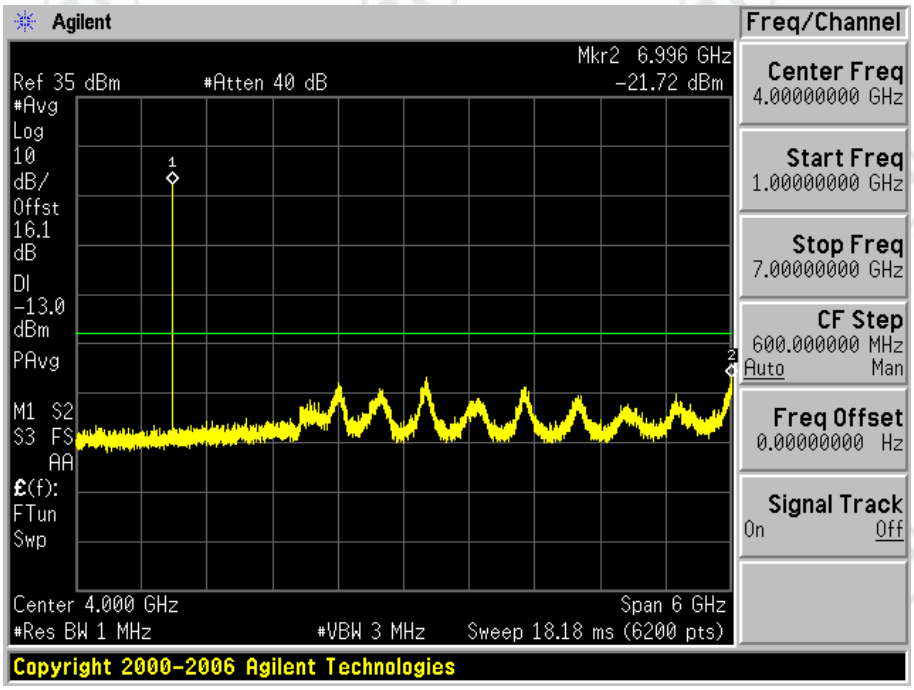

Agilent
Freq/Channel
Mkr1 19.501 GHz
Ref 35 dBm
#Atten 40 dB
-21.94 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

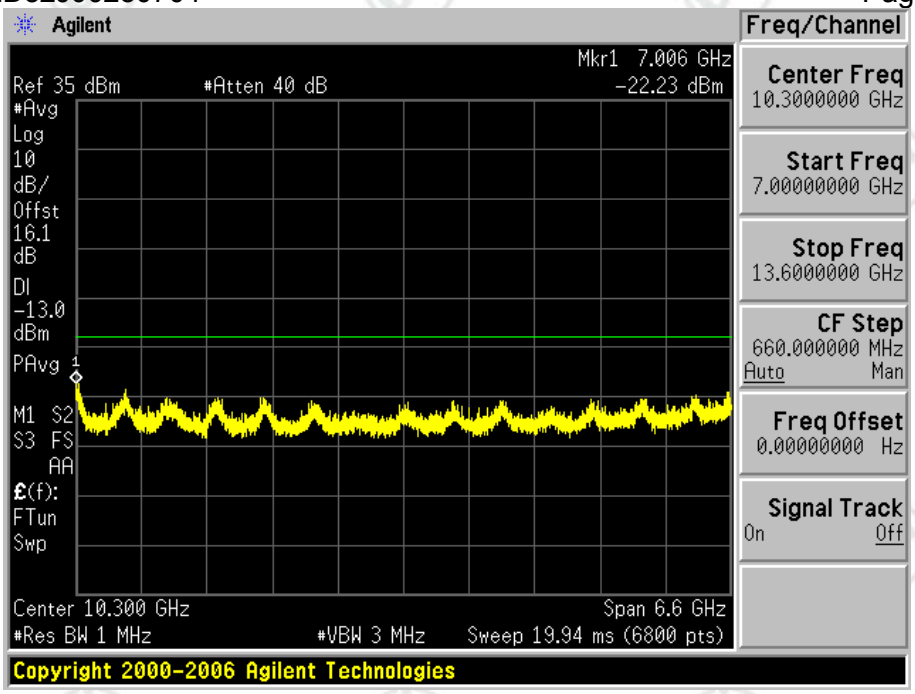
1.1.2.2 Test Channel=MCH

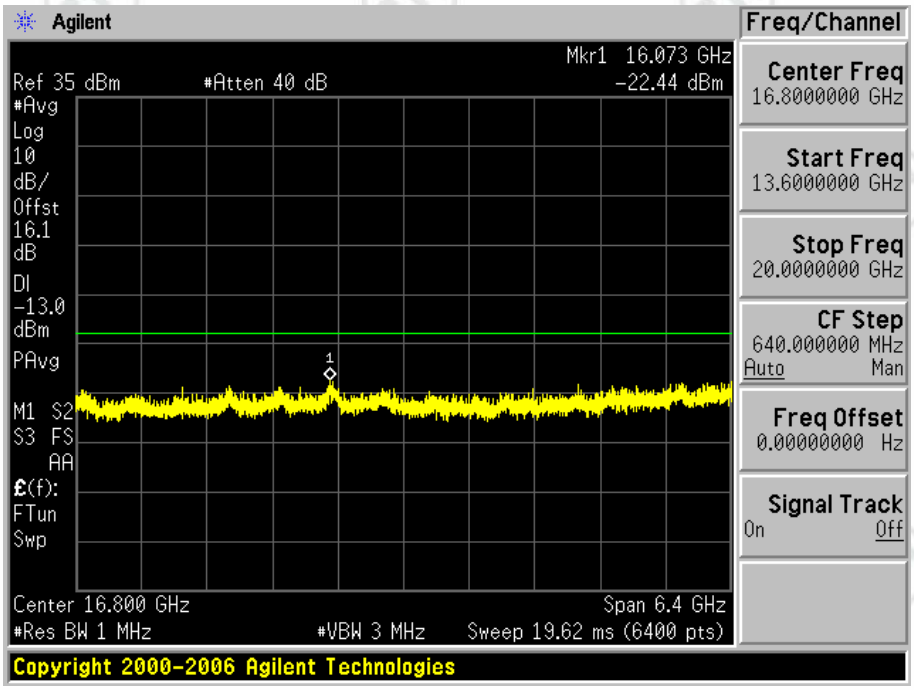




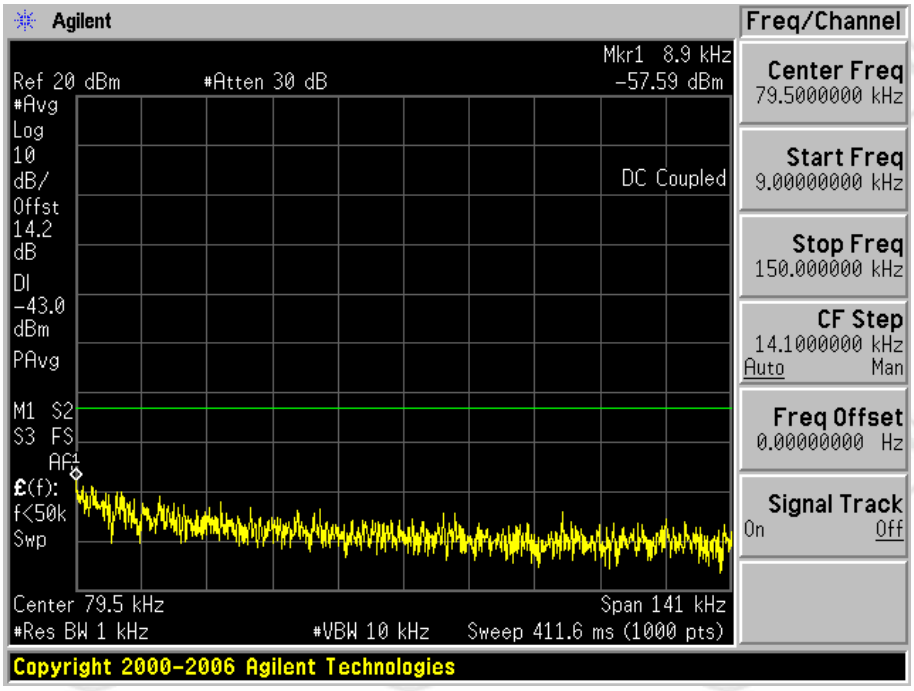

Agilent
Freq/Channel
Mkr1 574.7 MHz
Ref 35 dBm
#Atten 40 dB
-32.20 dBm
#Avg
Log
10
dB/
Offst
14
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Copyright 2000-2006 Agilent Technologies

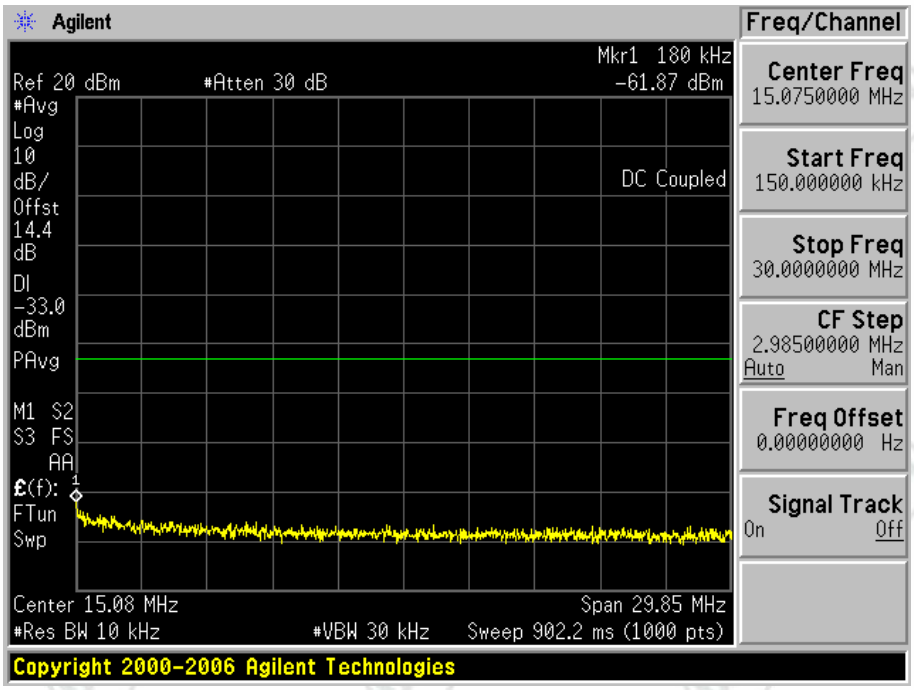

Agilent
Freq/Channel
Mkr2 6.996 GHz
Ref 35 dBm
#Atten 40 dB
-21.72 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
Copyright 2000-2006 Agilent Technologies

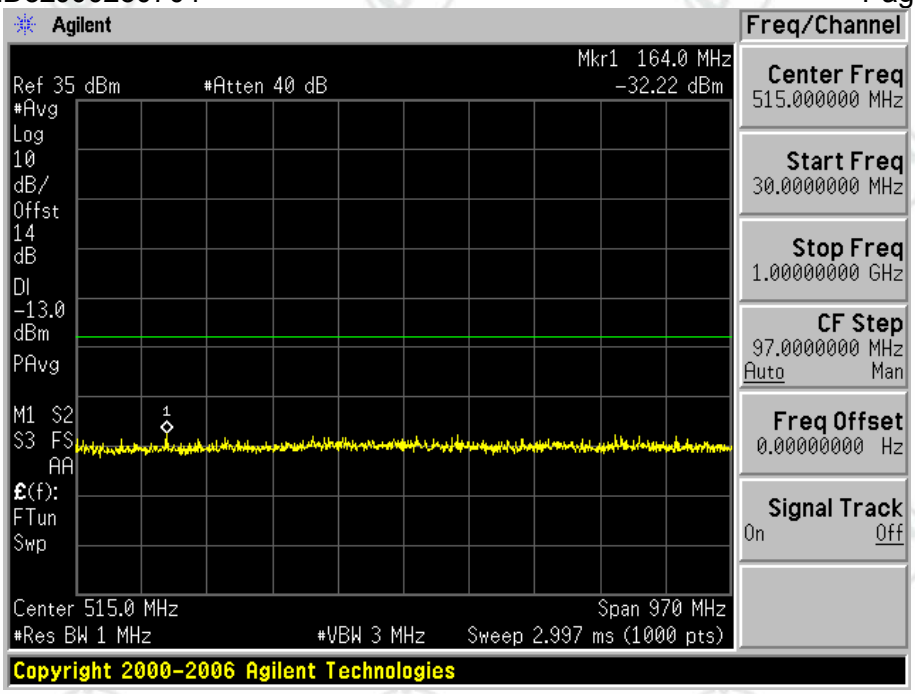

Agilent
Freq/Channel
Mkr1 7.006 GHz
Ref 35 dBm
#Atten 40 dB
-22.23 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

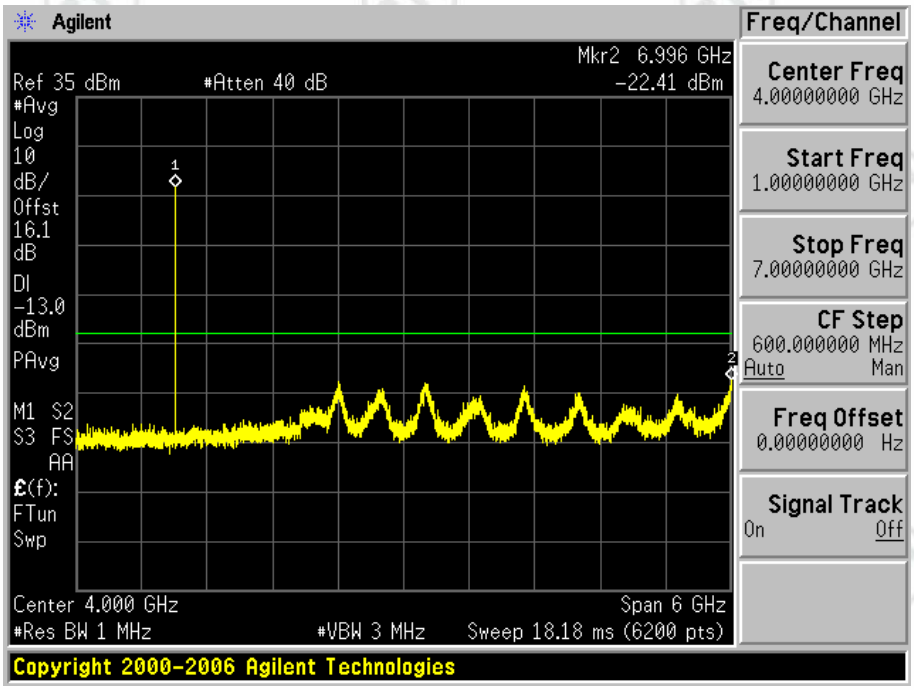

Agilent
Freq/Channel
Mkr1 16.073 GHz
Ref 35 dBm
#Atten 40 dB
-22.44 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

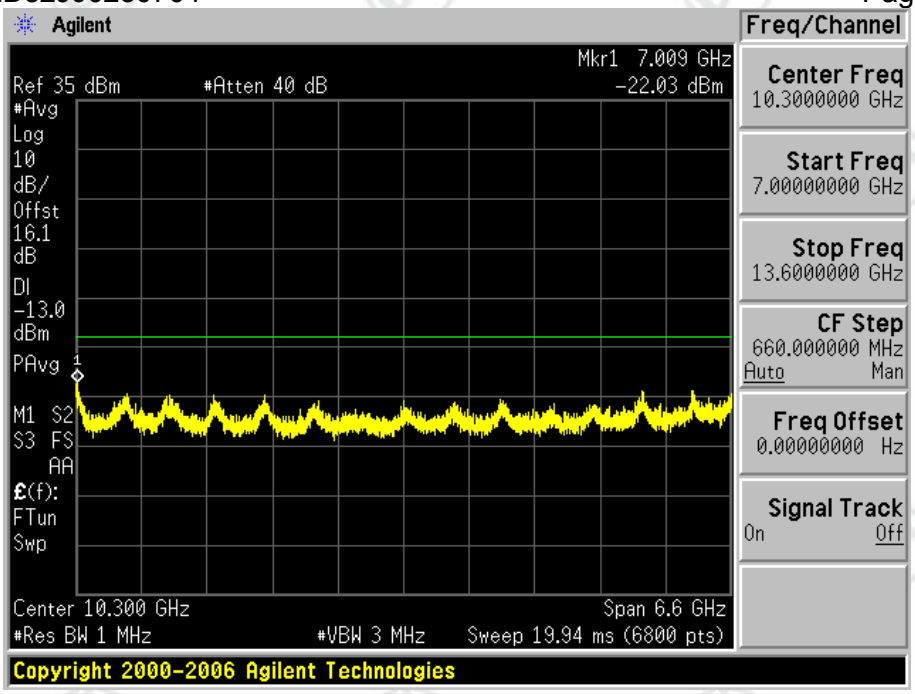
1.1.2.3 Test Channel=HCH

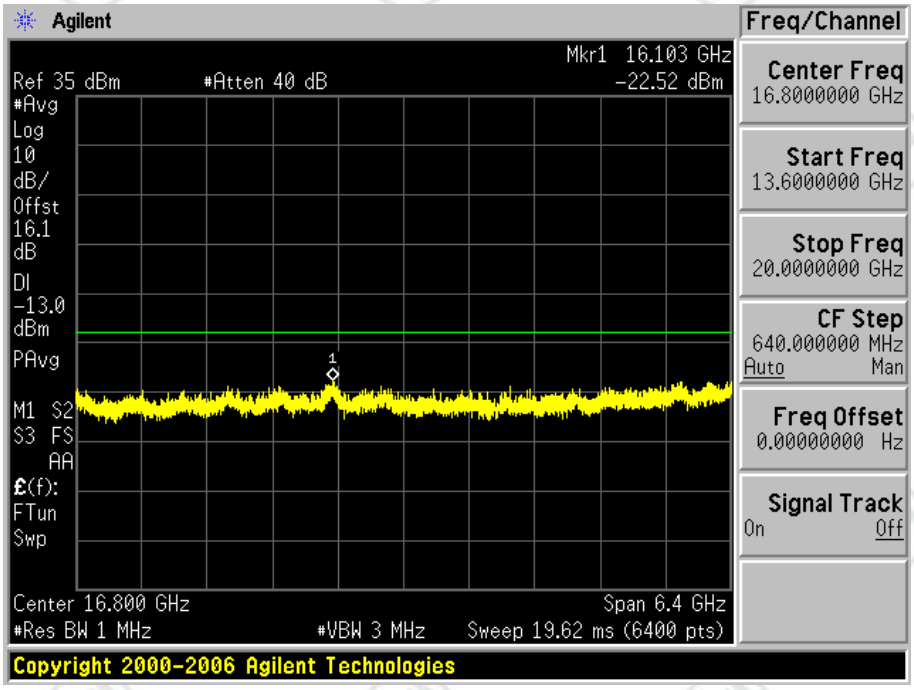





Agilent
Freq/Channel
Mkr1 164.0 MHz
Ref 35 dBm
#Atten 40 dB
-32.22 dBm
#Avg
Log
10
dB/
Offst
14
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies


Agilent
Freq/Channel
Mkr2 6.996 GHz
Ref 35 dBm
#Atten 40 dB
-22.41 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies


Agilent
Freq/Channel
Mkr1 7.009 GHz
Ref 35 dBm
#Atten 40 dB
-22.03 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

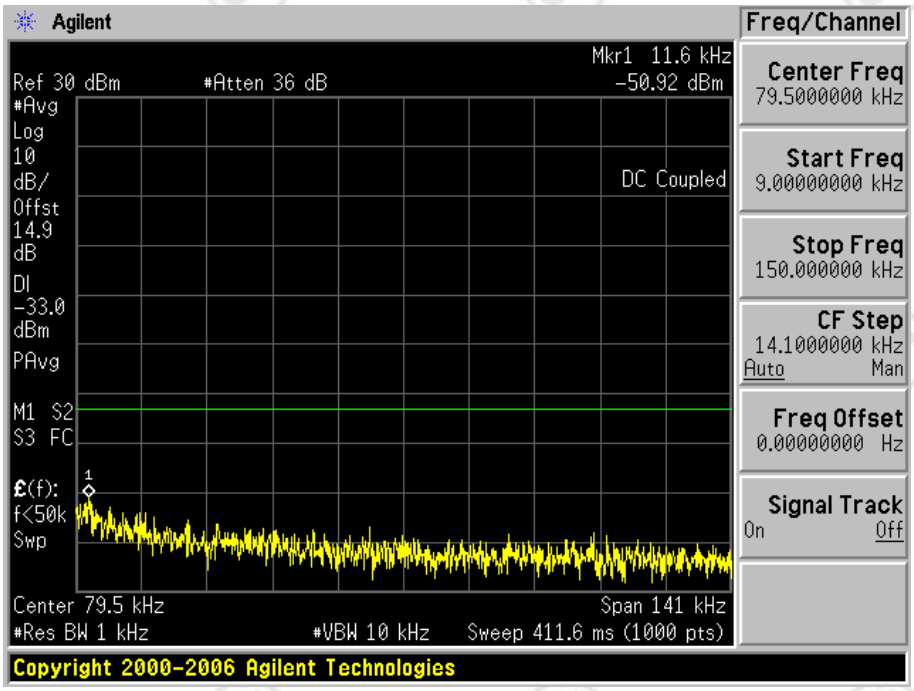

Agilent
Freq/Channel
Mkr1 16.103 GHz
Ref 35 dBm
#Atten 40 dB
-22.52 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FS
AA
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

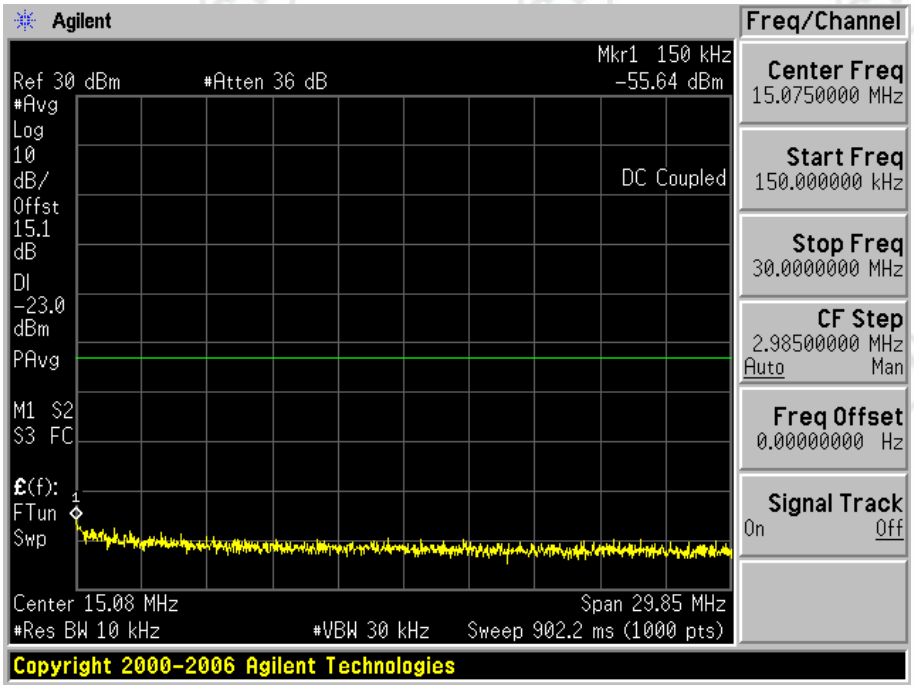
2 For WCDMA

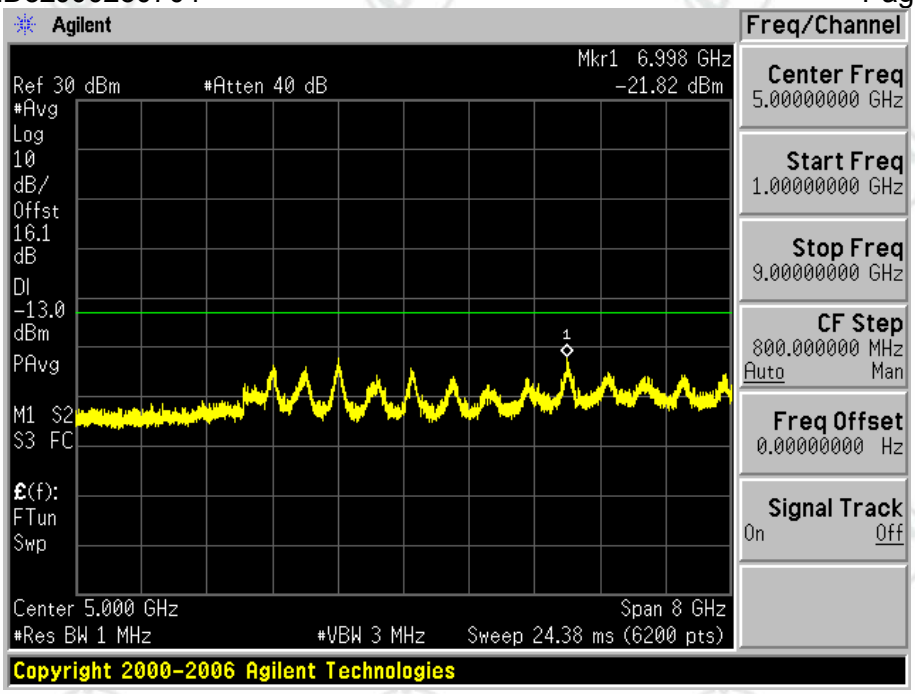
2.1 Test Band=WCDMA850

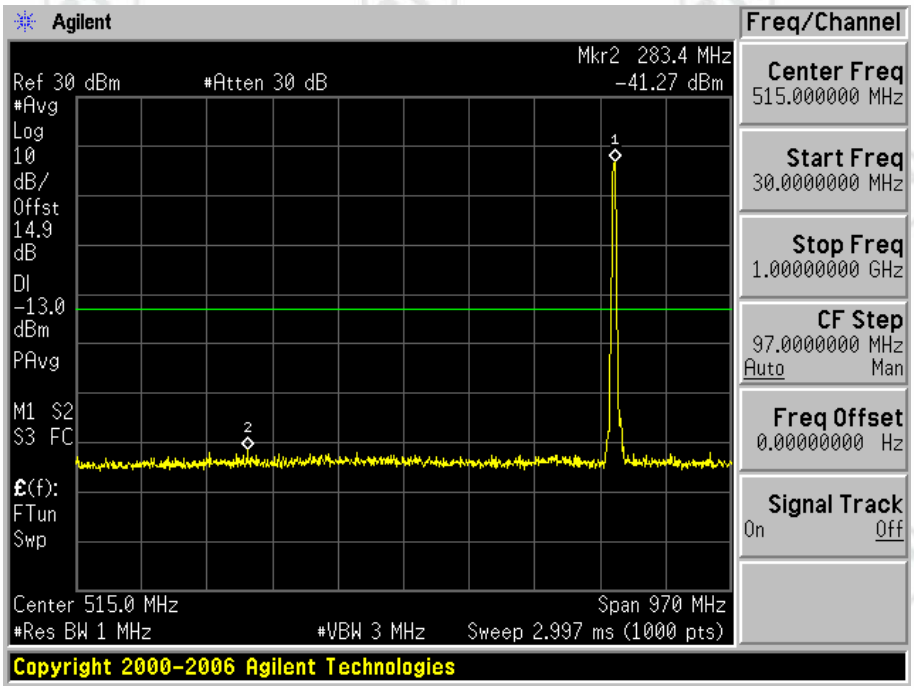
2.1.1 Test Mode=UMTS/TM1

2.1.1.1 Test Channel=LCH

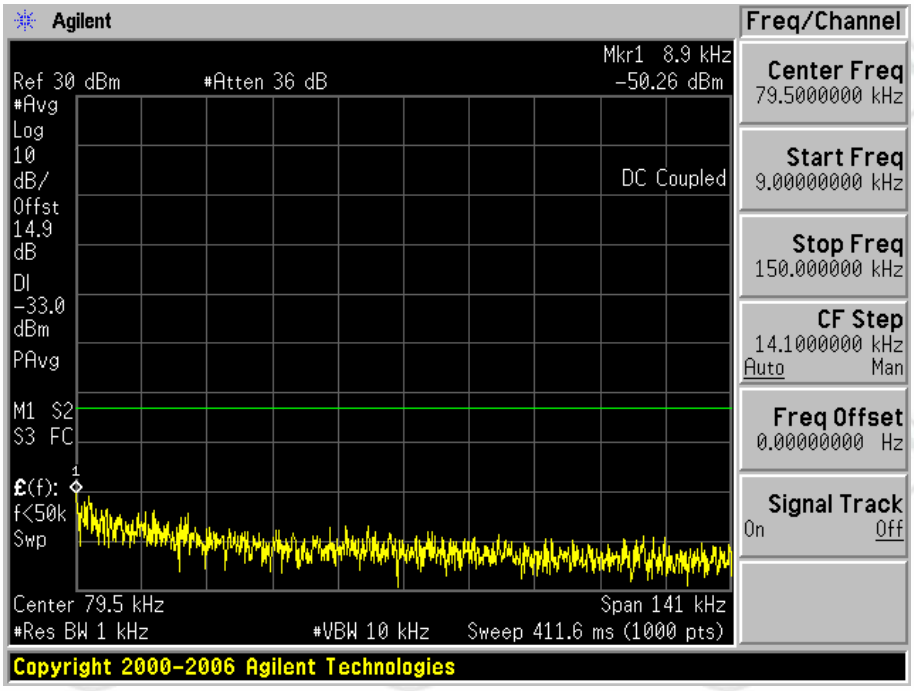


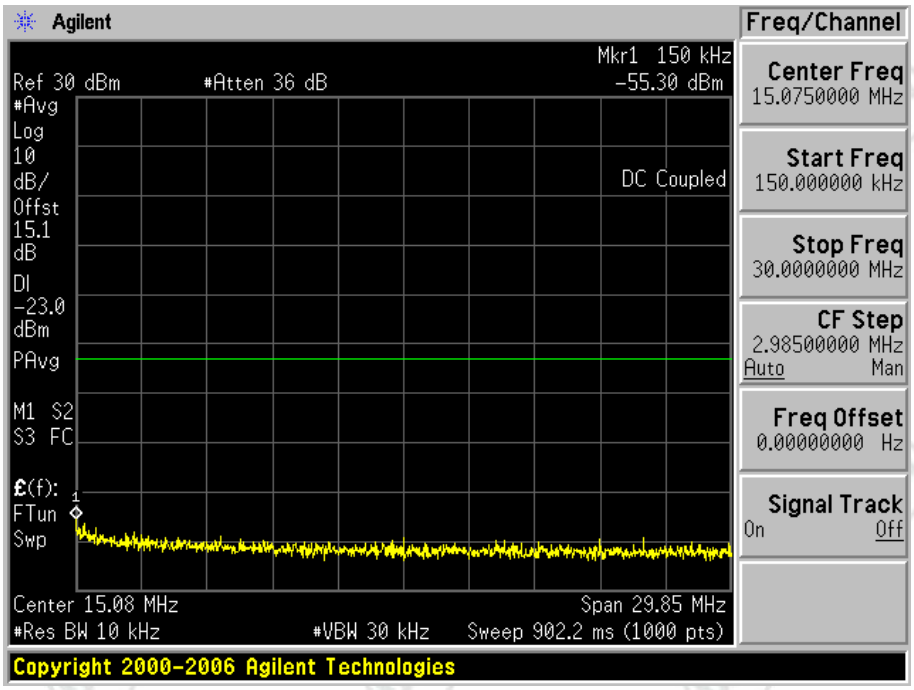


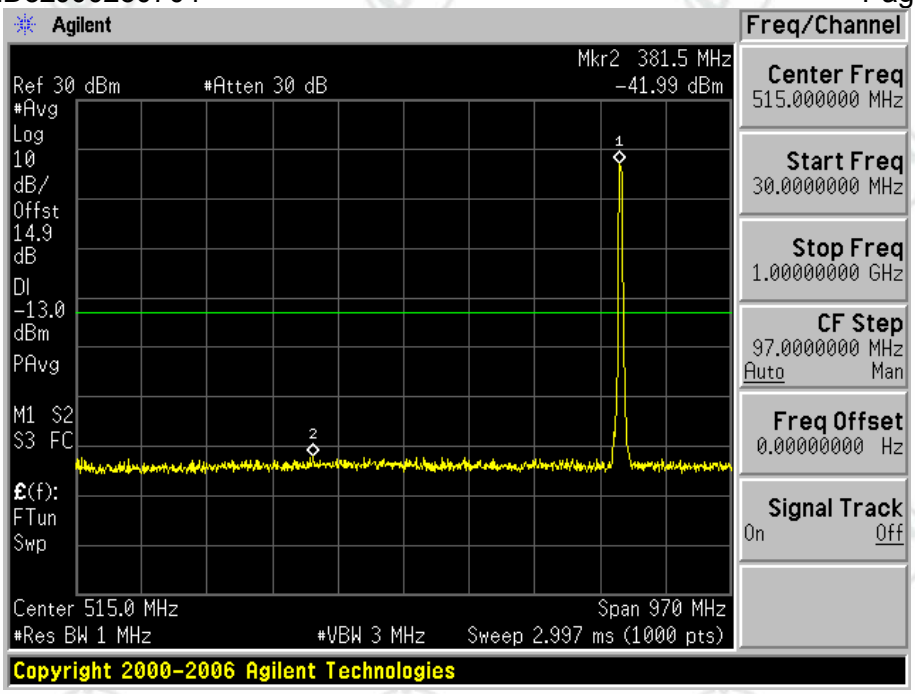

Agilent
Freq/Channel
Mkr1 6.998 GHz
Ref 30 dBm
#Atten 40 dB
-21.82 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
5.000000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
9.000000000 GHz
CF Step
800.000000 MHz
Auto Man
Freq Offset
0.000000000 Hz
Signal Track
On Off
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.38 ms (6200 pts)
Copyright 2000-2006 Agilent Technologies

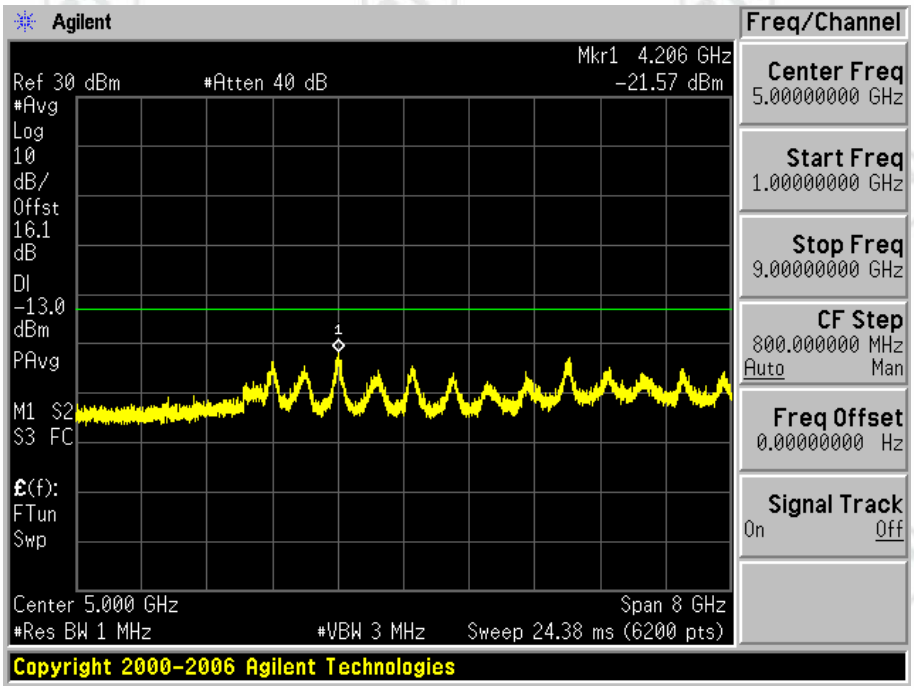

Agilent
Freq/Channel
Mkr2 283.4 MHz
Ref 30 dBm
#Atten 30 dB
-41.27 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.000000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.000000000 Hz
Signal Track
On Off
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Copyright 2000-2006 Agilent Technologies

2.1.1.2 Test Channel=MCH

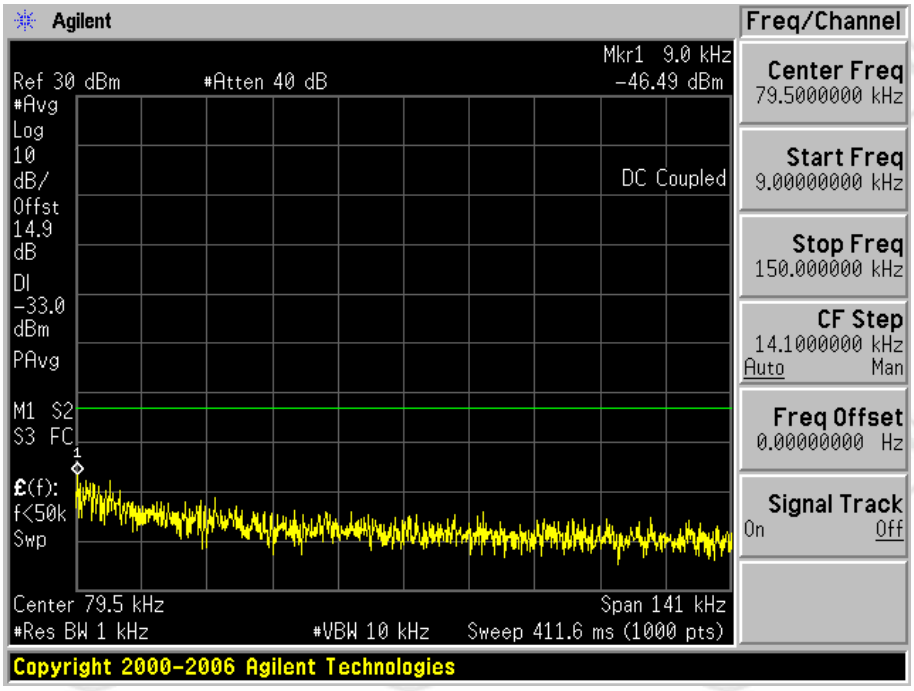


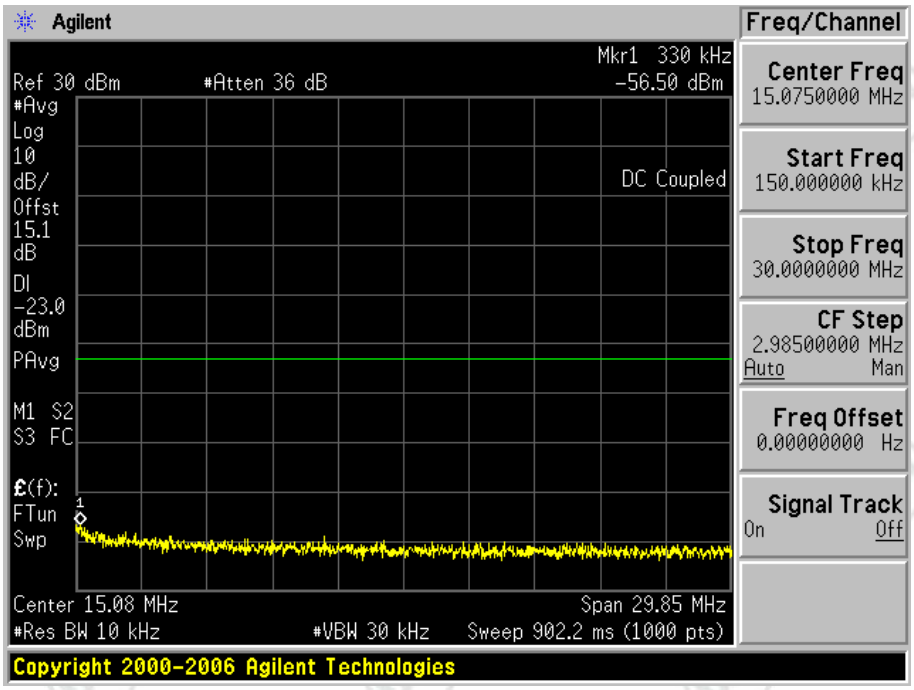


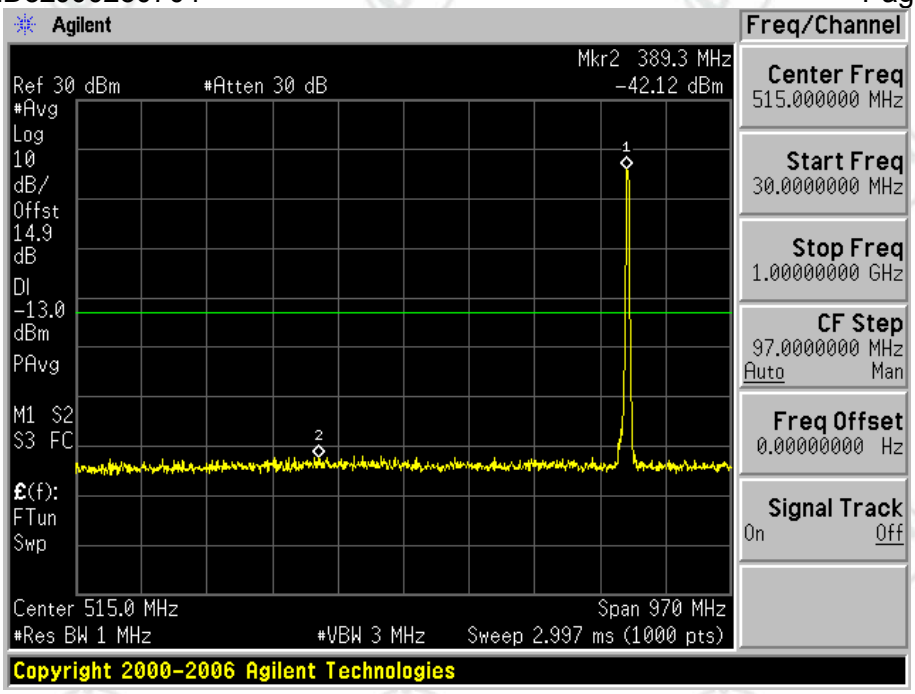

Agilent
Freq/Channel
Mkr2 381.5 MHz
Ref 30 dBm
#Atten 30 dB
-41.99 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

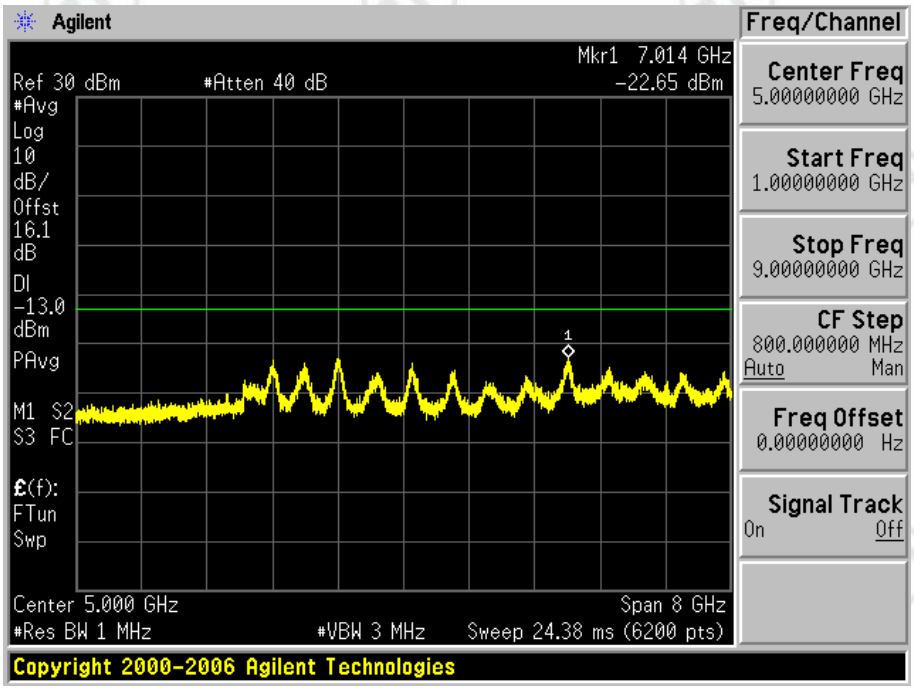

Agilent
Freq/Channel
Mkr1 4.206 GHz
Ref 30 dBm
#Atten 40 dB
-21.57 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.38 ms (6200 pts)
Center Freq
5.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
9.00000000 GHz
CF Step
800.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

2.1.1.3 Test Channel=HCH



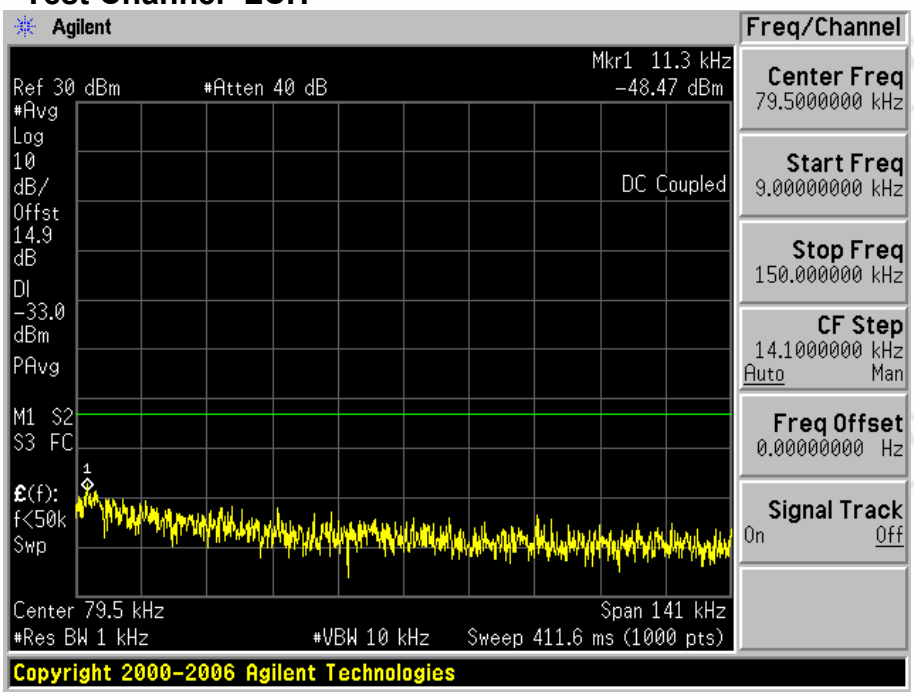


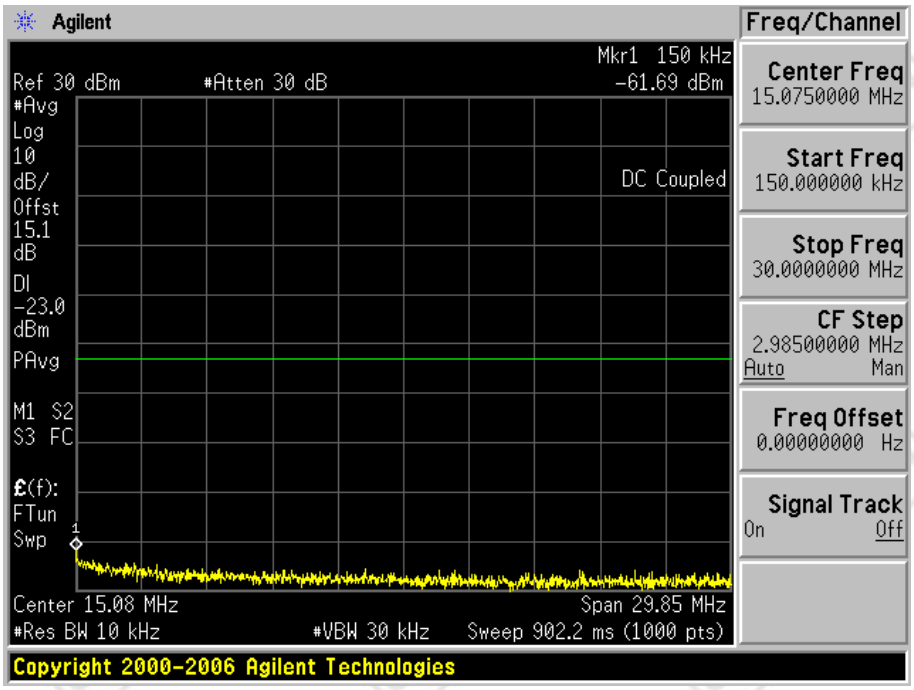

Agilent
Freq/Channel
Mkr2 389.3 MHz
Ref 30 dBm
#Atten 30 dB
-42.12 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

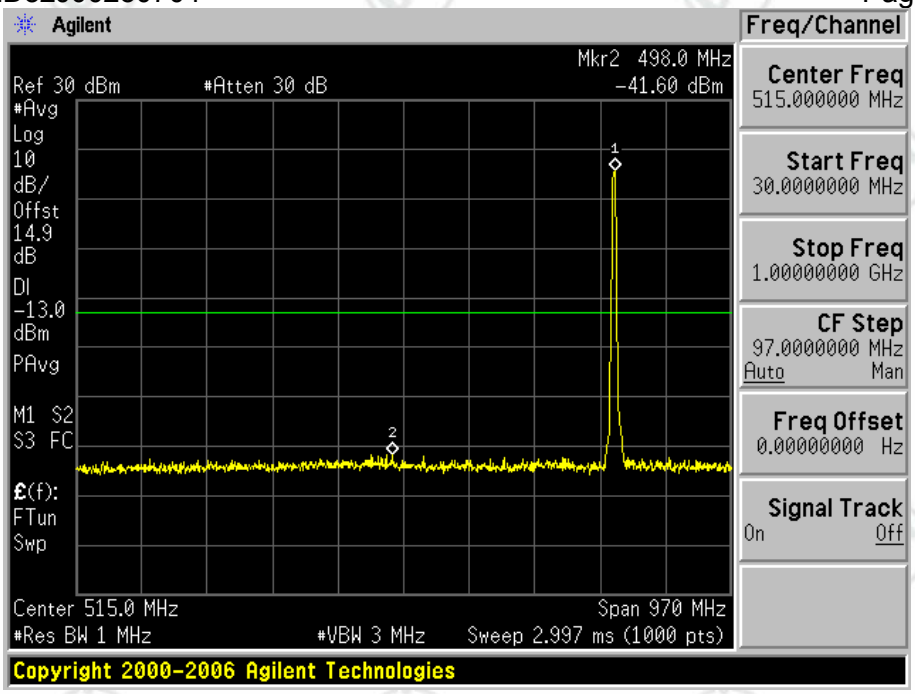

Agilent
Freq/Channel
Mkr1 7.014 GHz
Ref 30 dBm
#Atten 40 dB
-22.65 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.38 ms (6200 pts)
Center Freq
5.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
9.00000000 GHz
CF Step
800.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

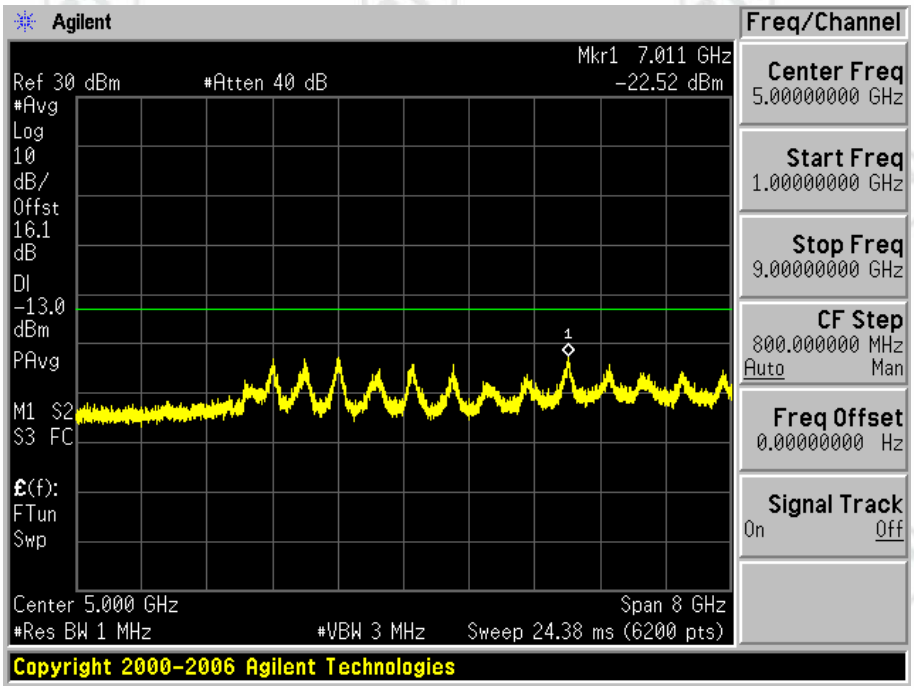
2.1.2 Test Mode=UMTS/TM2

2.1.2.1 Test Channel=LCH

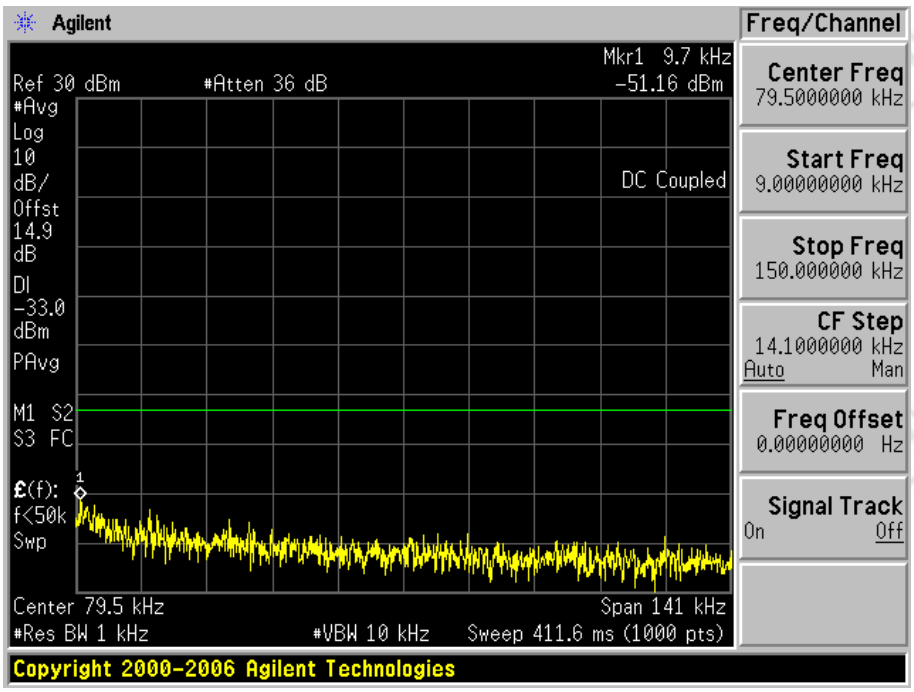


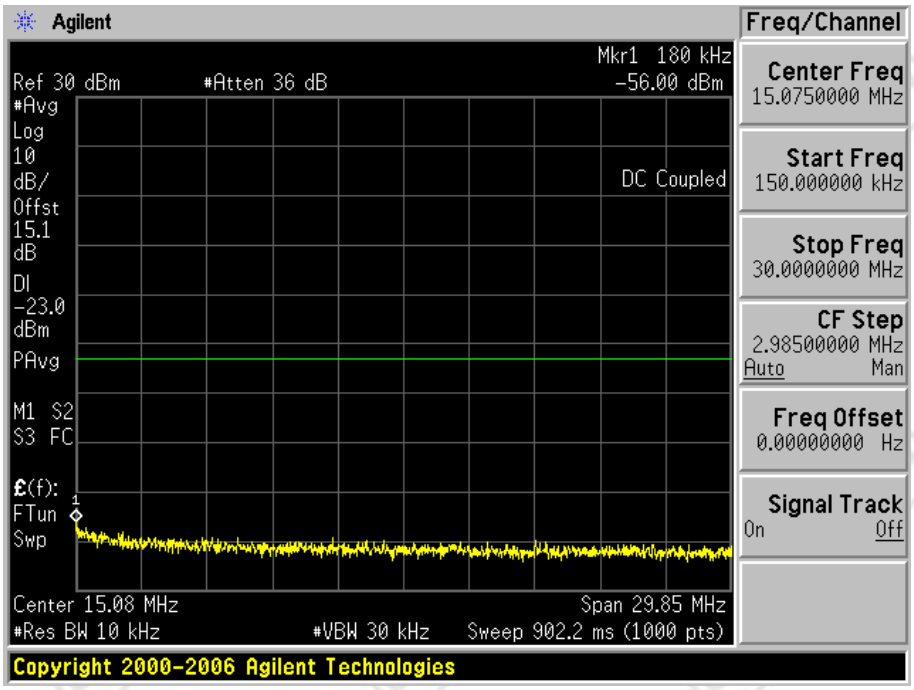


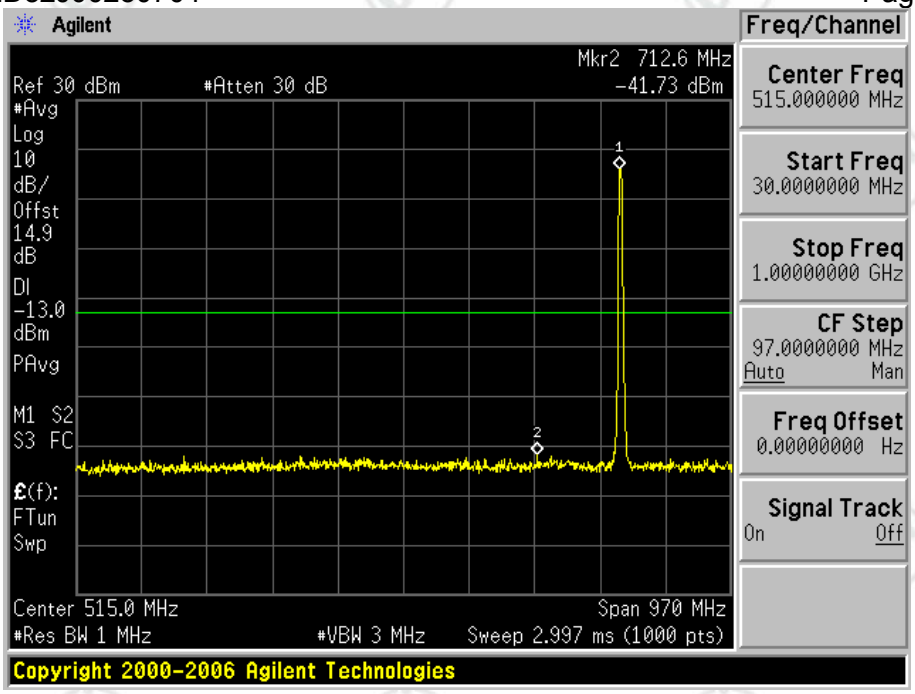

Agilent
Freq/Channel
Mkr2 498.0 MHz
Ref 30 dBm
#Atten 30 dB
-41.60 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

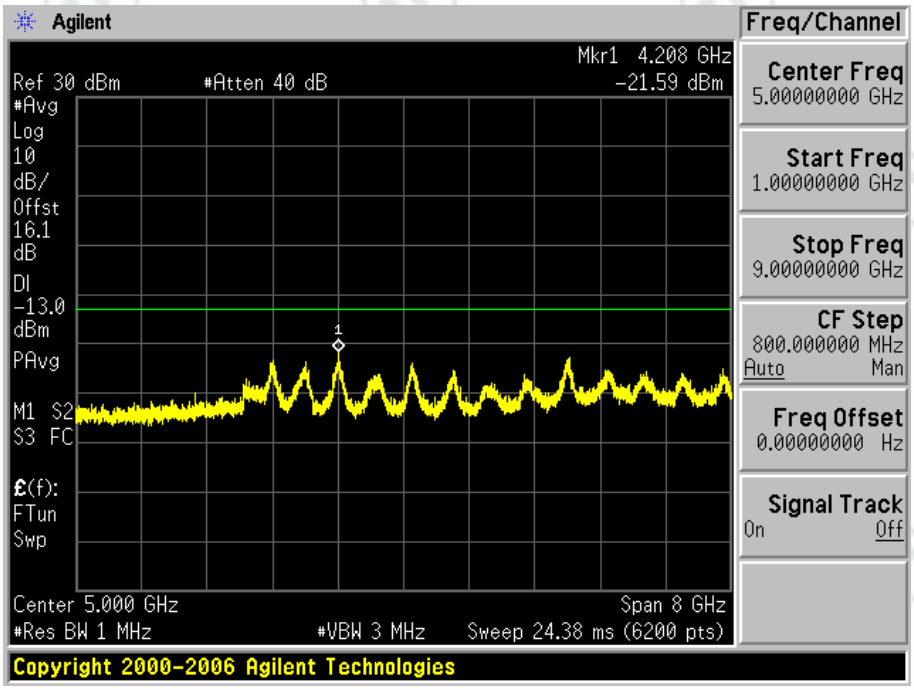

Agilent
Freq/Channel
Mkr1 7.011 GHz
Ref 30 dBm
#Atten 40 dB
-22.52 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.38 ms (6200 pts)
Center Freq
5.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
9.00000000 GHz
CF Step
800.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

2.1.2.2 Test Channel=MCH

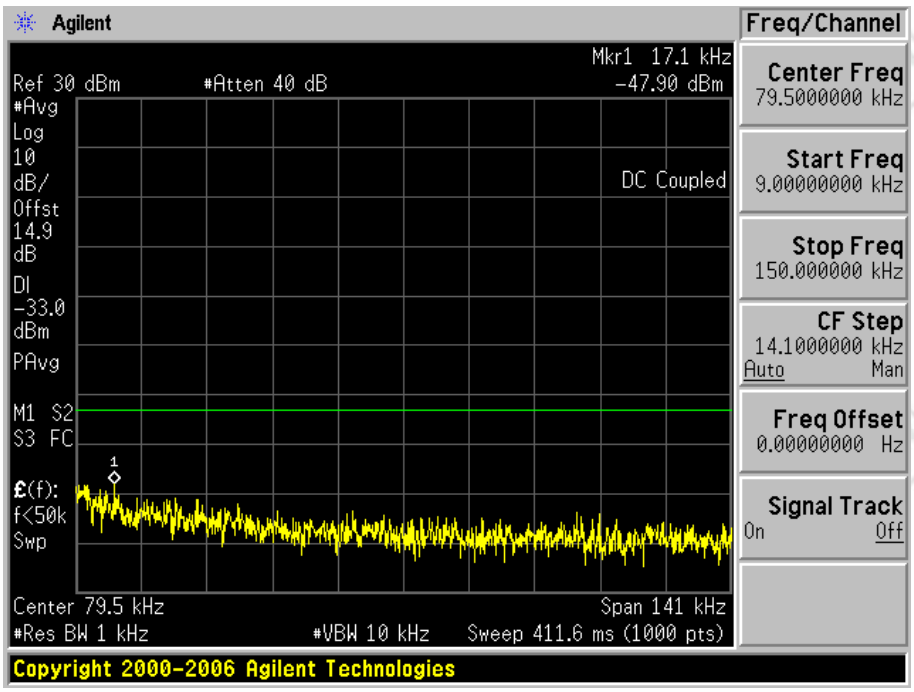


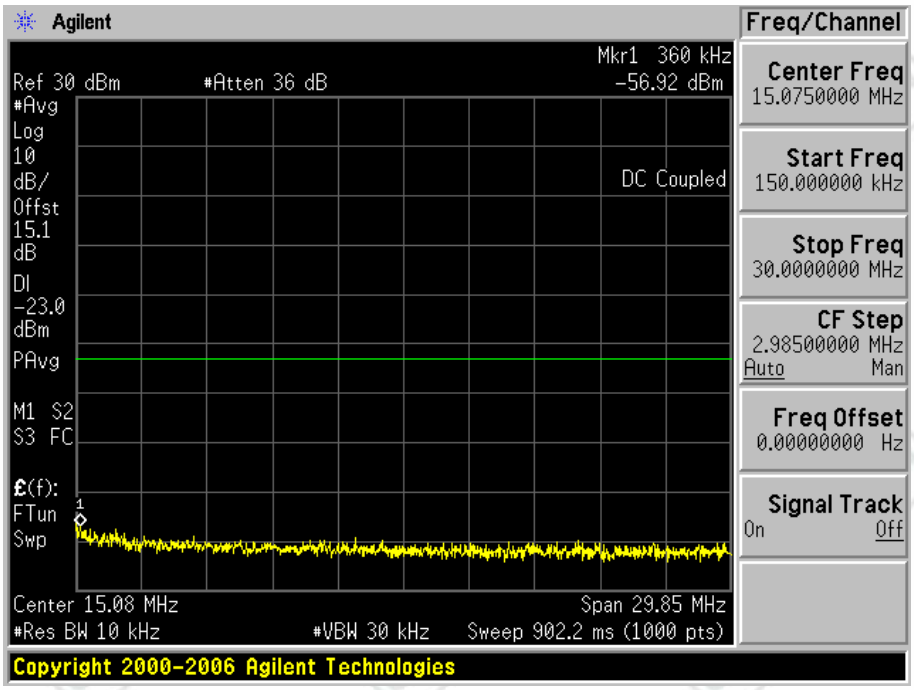


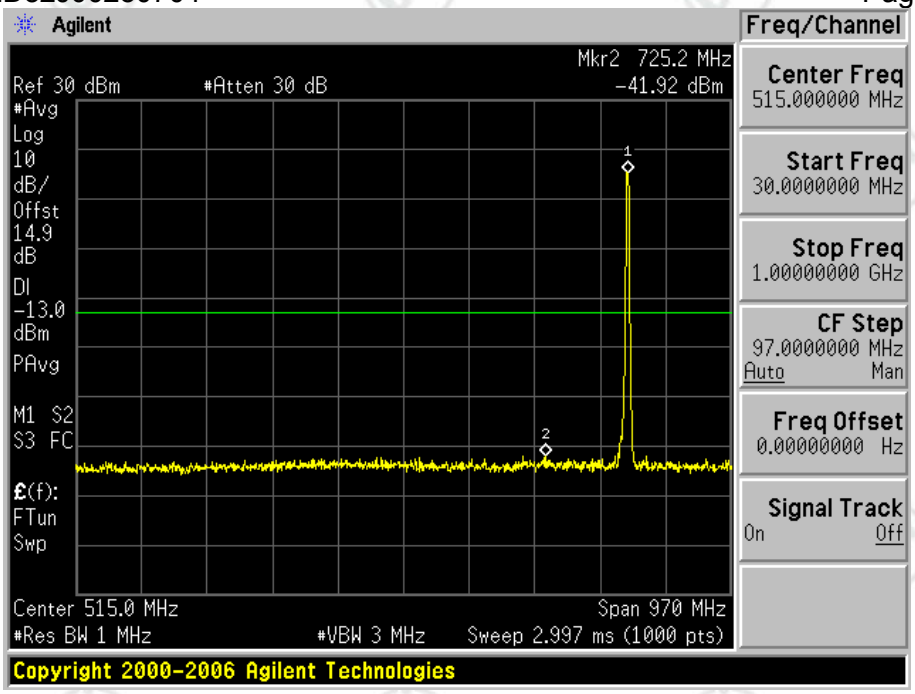

Agilent
Freq/Channel
Mkr2 712.6 MHz
Ref 30 dBm
#Atten 30 dB
-41.73 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Copyright 2000-2006 Agilent Technologies

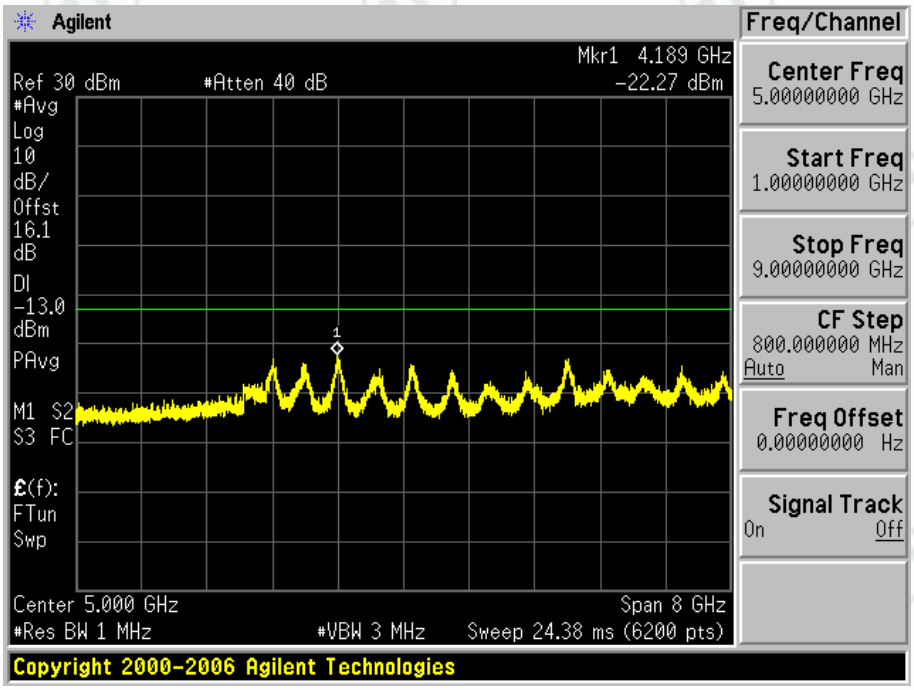

Agilent
Freq/Channel
Mkr1 4.208 GHz
Ref 30 dBm
#Atten 40 dB
-21.59 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
5.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
9.00000000 GHz
CF Step
800.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.38 ms (6200 pts)
Copyright 2000-2006 Agilent Technologies

2.1.2.3 Test Channel=HCH



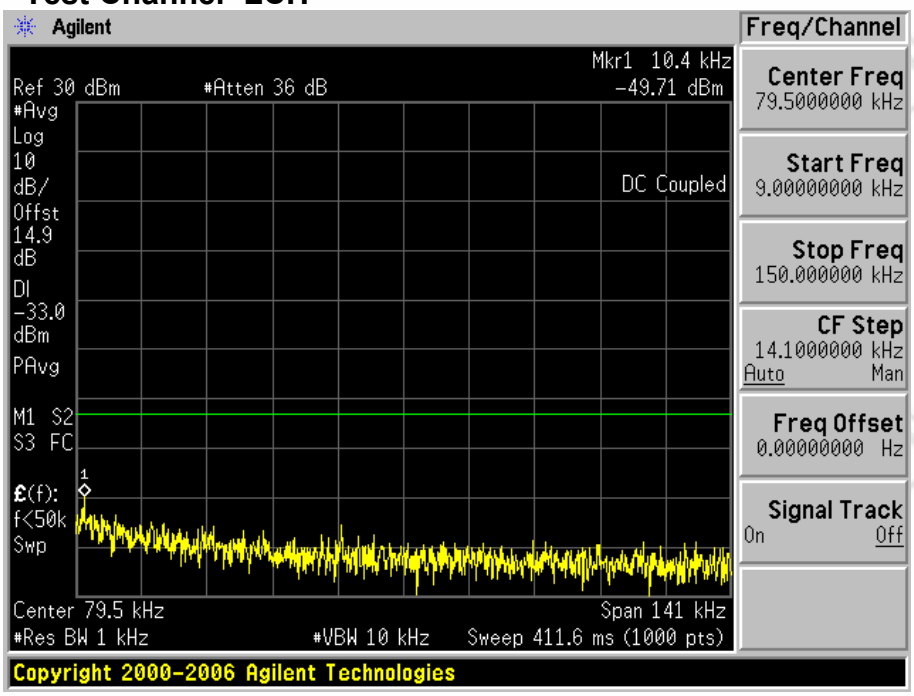


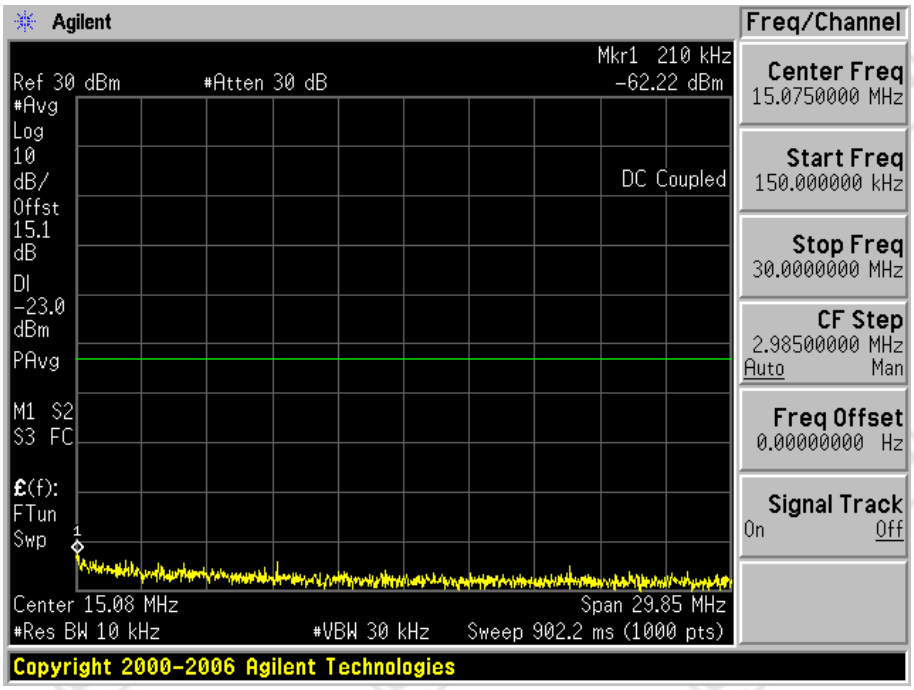

Agilent
Freq/Channel
Mkr2 725.2 MHz
Ref 30 dBm
#Atten 30 dB
-41.92 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

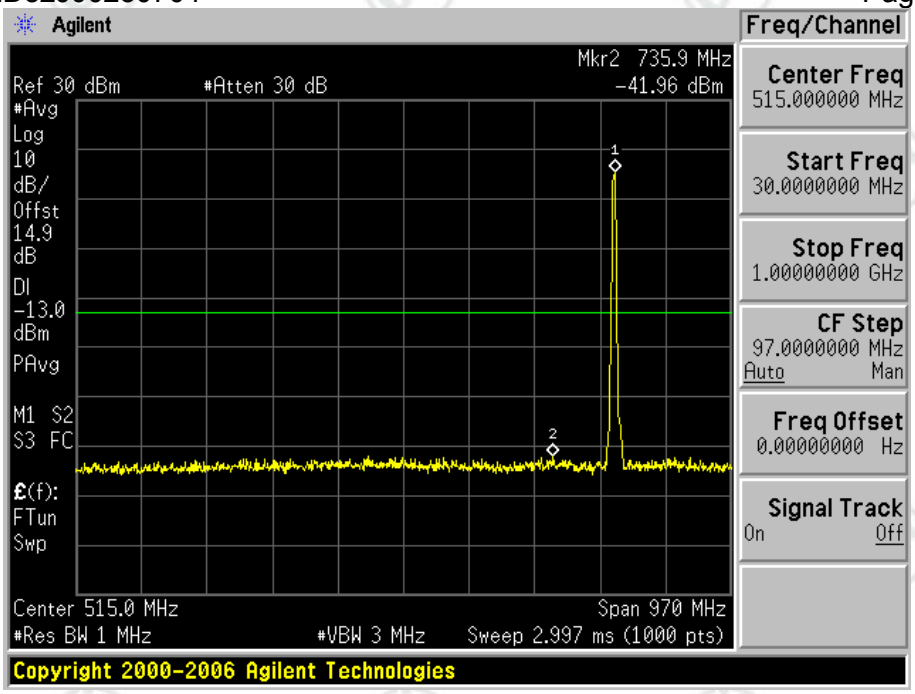

Agilent
Freq/Channel
Mkr1 4.189 GHz
Ref 30 dBm
#Atten 40 dB
-22.27 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.38 ms (6200 pts)
Center Freq
5.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
9.00000000 GHz
CF Step
800.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

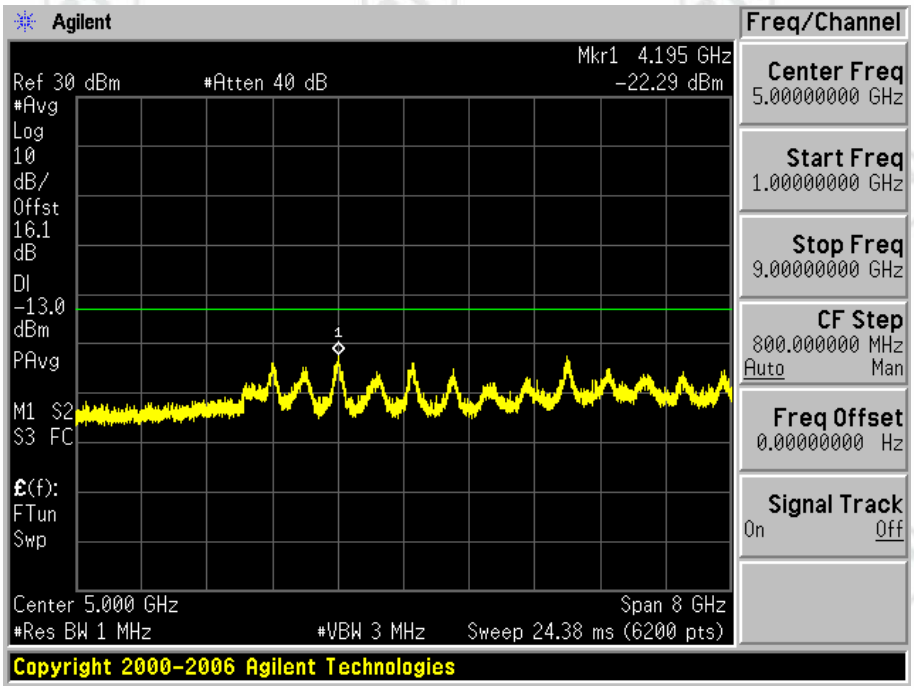
2.1.3 Test Mode=UMTS/TM3

2.1.3.1 Test Channel=LCH

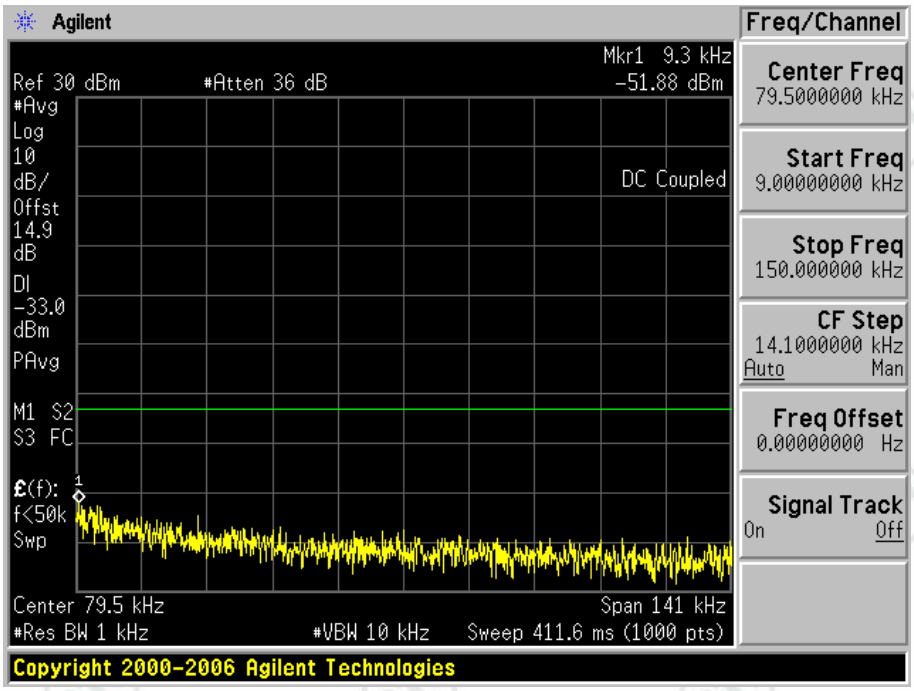


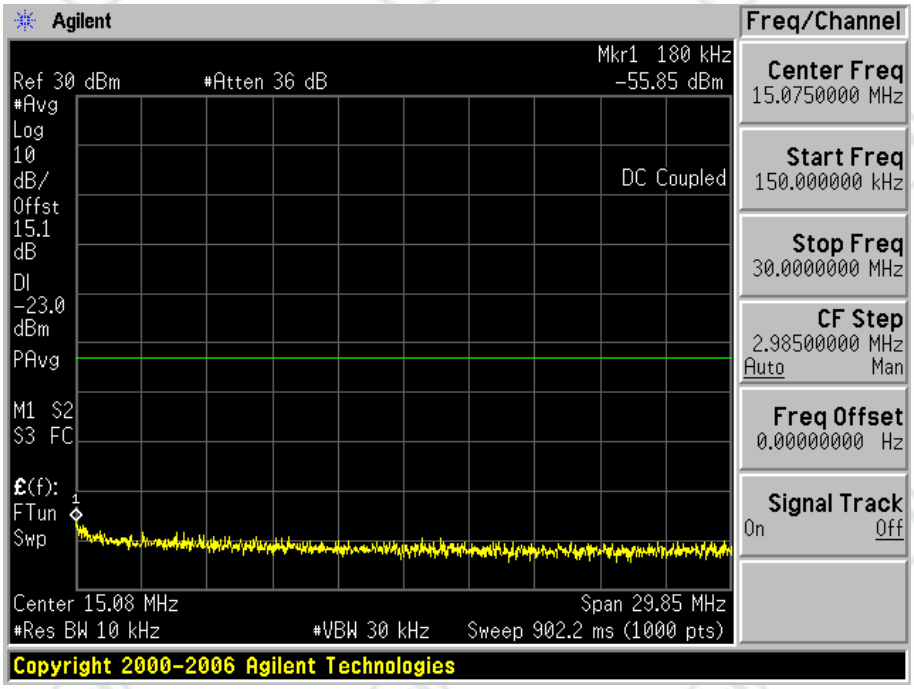


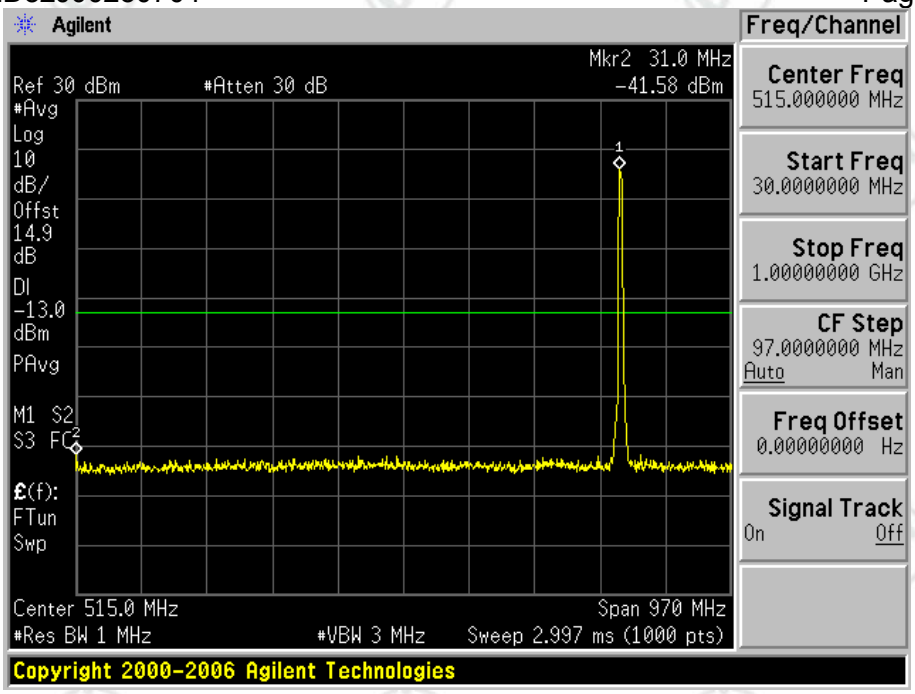

Agilent
Freq/Channel
Mkr2 735.9 MHz
Ref 30 dBm
#Atten 30 dB
-41.96 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Copyright 2000-2006 Agilent Technologies

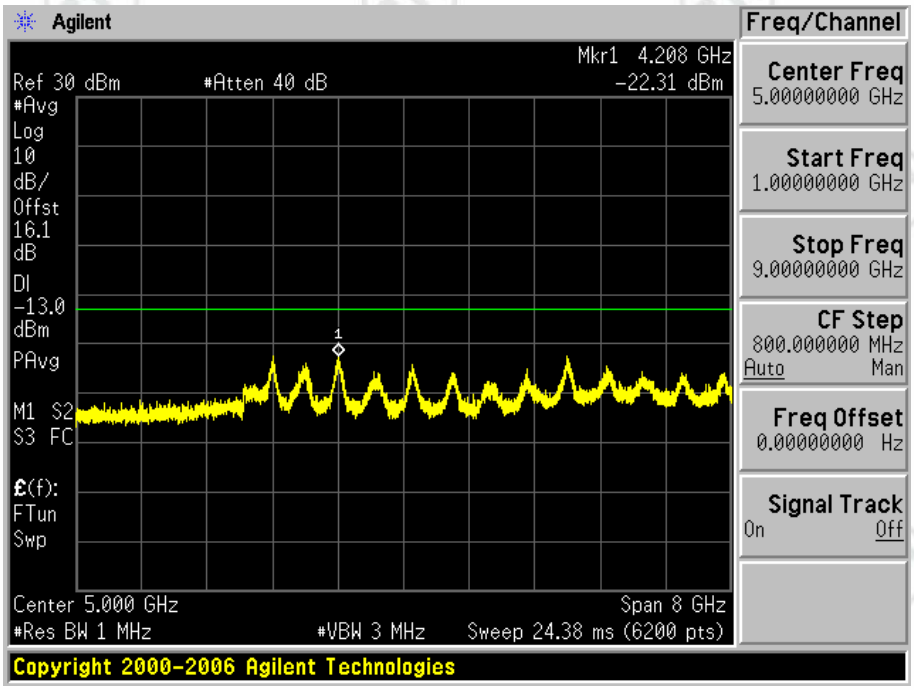

Agilent
Freq/Channel
Mkr1 4.195 GHz
Ref 30 dBm
#Atten 40 dB
-22.29 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
5.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
9.00000000 GHz
CF Step
800.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.38 ms (6200 pts)
Copyright 2000-2006 Agilent Technologies

Test Channel=MCH

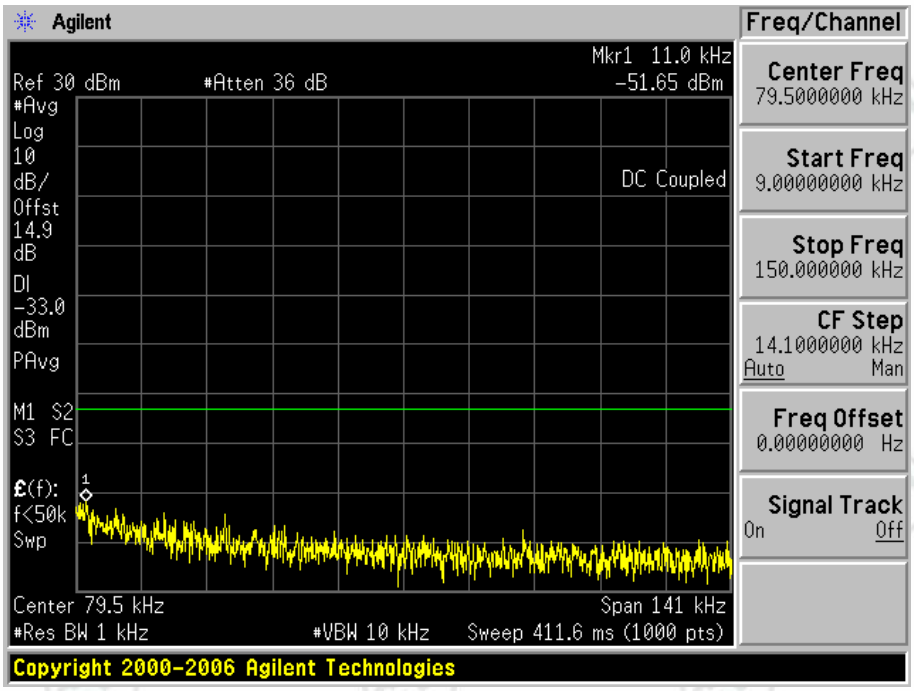


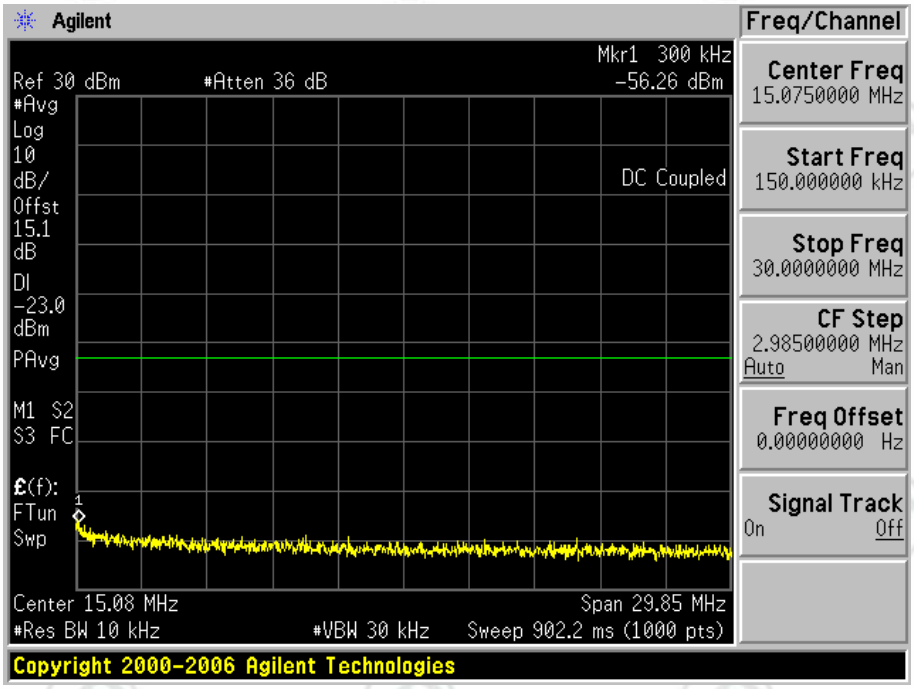


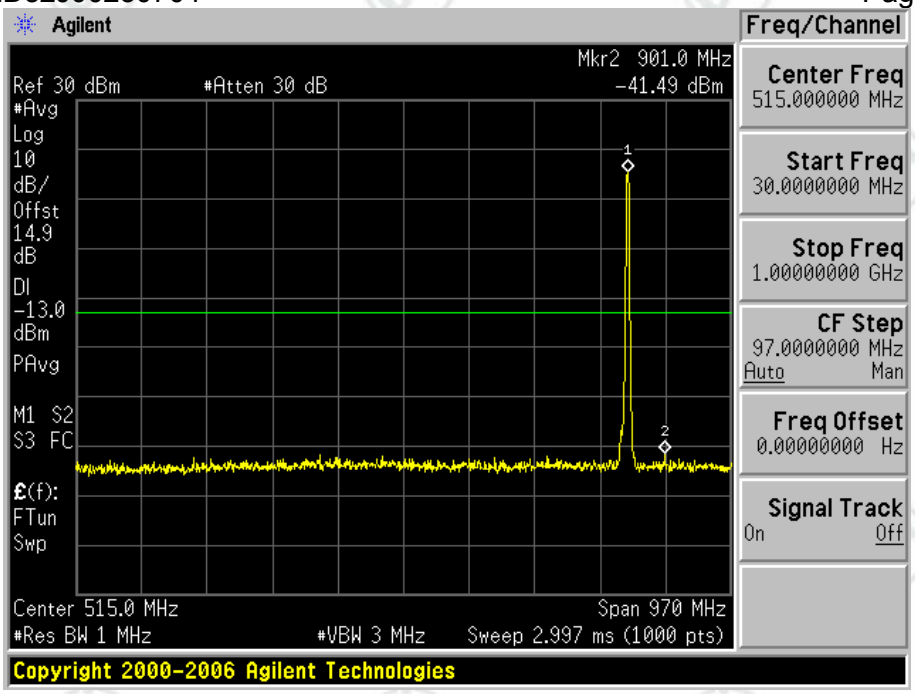

Agilent
Freq/Channel
Mkr2 31.0 MHz
Ref 30 dBm
#Atten 30 dB
-41.58 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

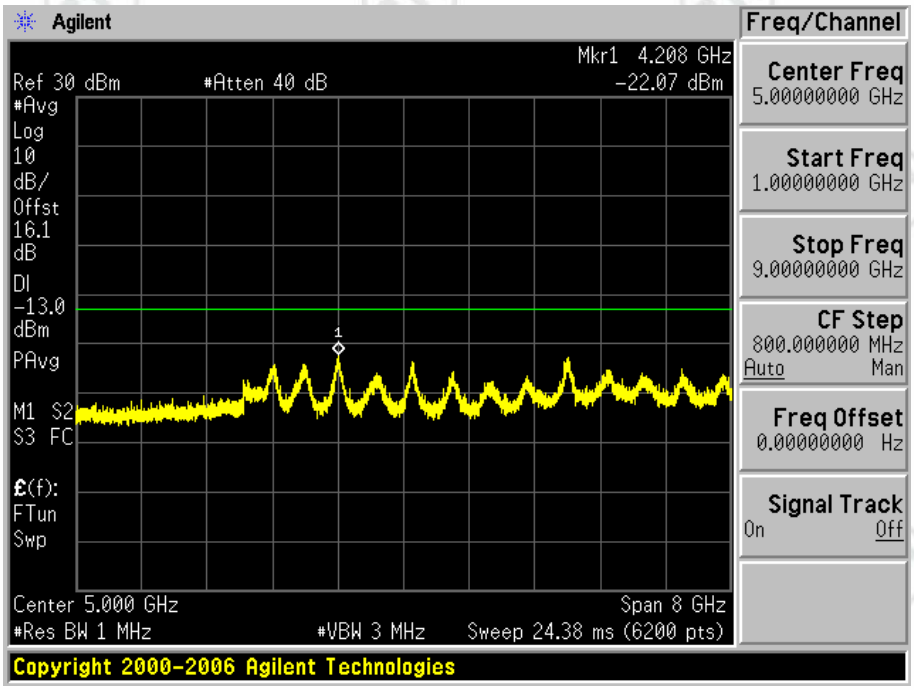

Agilent
Freq/Channel
Mkr1 4.208 GHz
Ref 30 dBm
#Atten 40 dB
-22.31 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.38 ms (6200 pts)
Center Freq
5.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
9.00000000 GHz
CF Step
800.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

2.1.3.2 Test Channel=HCH





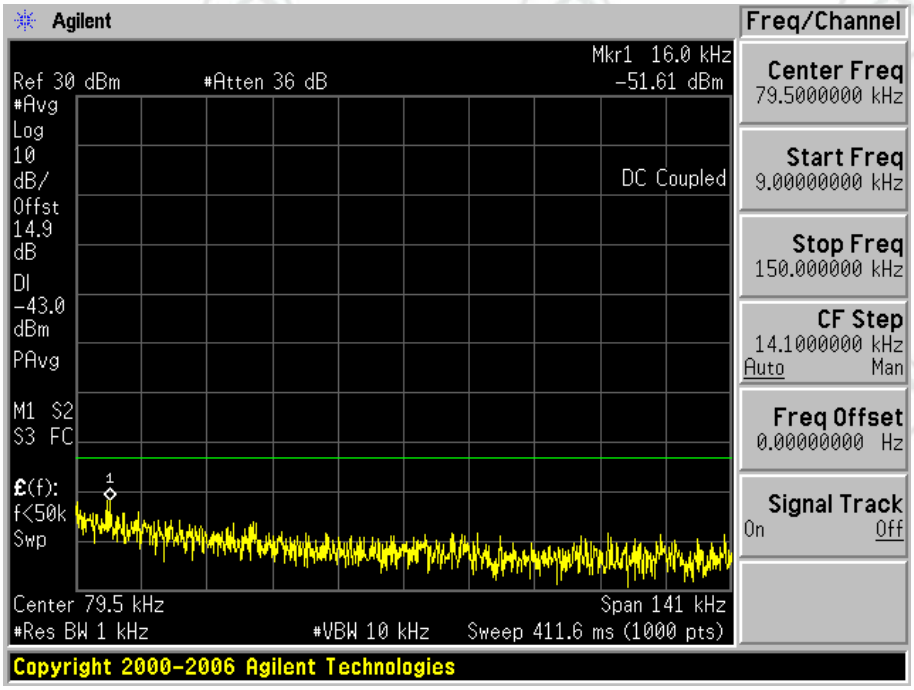

Agilent
Freq/Channel
Mkr2 901.0 MHz
Ref 30 dBm
#Atten 30 dB
-41.49 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

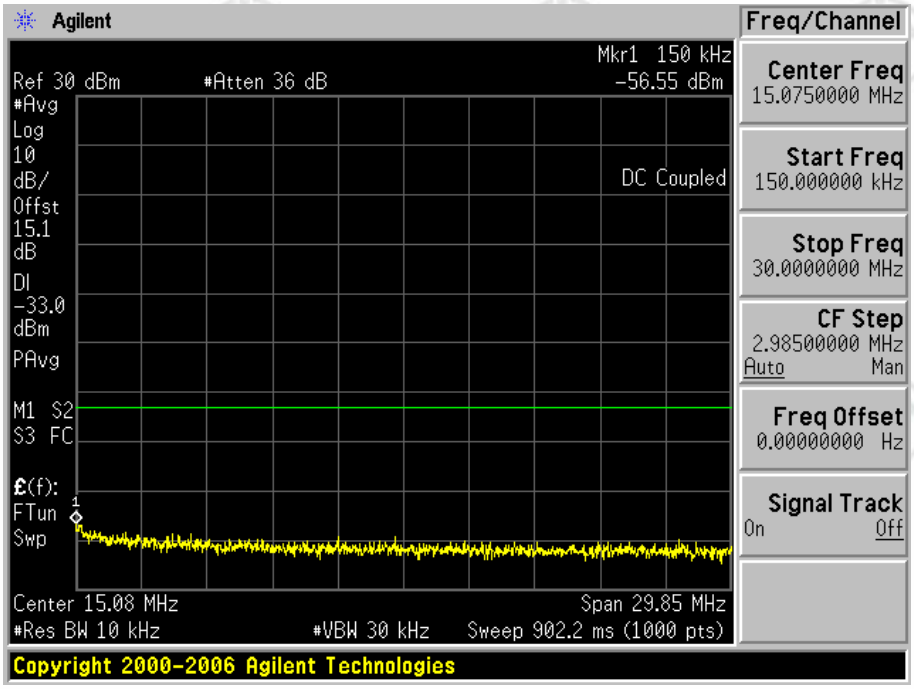

Agilent
Freq/Channel
Mkr1 4.208 GHz
Ref 30 dBm
#Atten 40 dB
-22.07 dBm
#Avg
Log
10
dB/
Offst
16.1
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 5.000 GHz
Span 8 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 24.38 ms (6200 pts)
Center Freq
5.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
9.00000000 GHz
CF Step
800.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

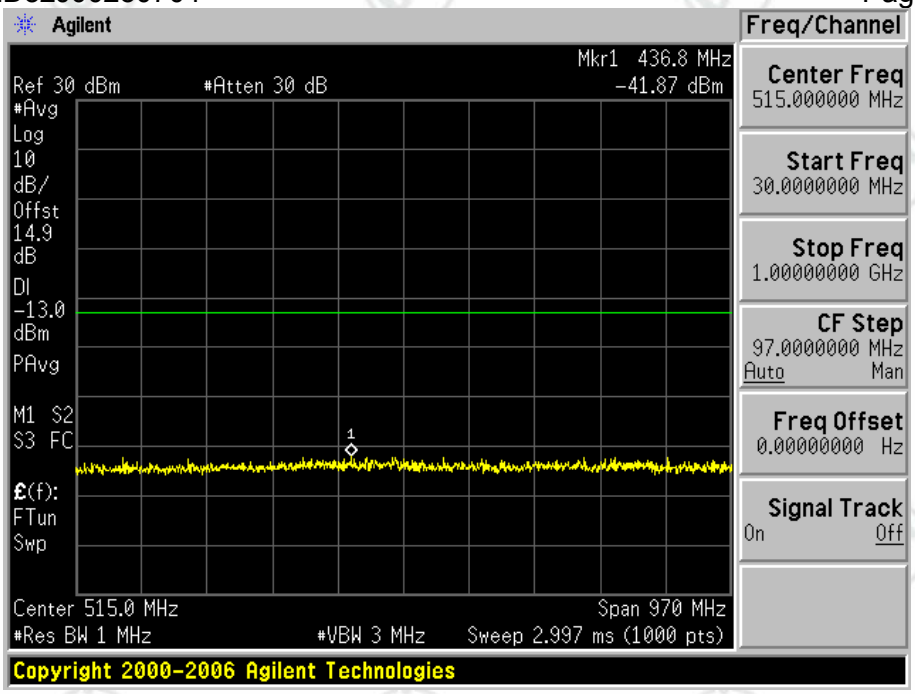
2.2 Test Band=WCDMA1900

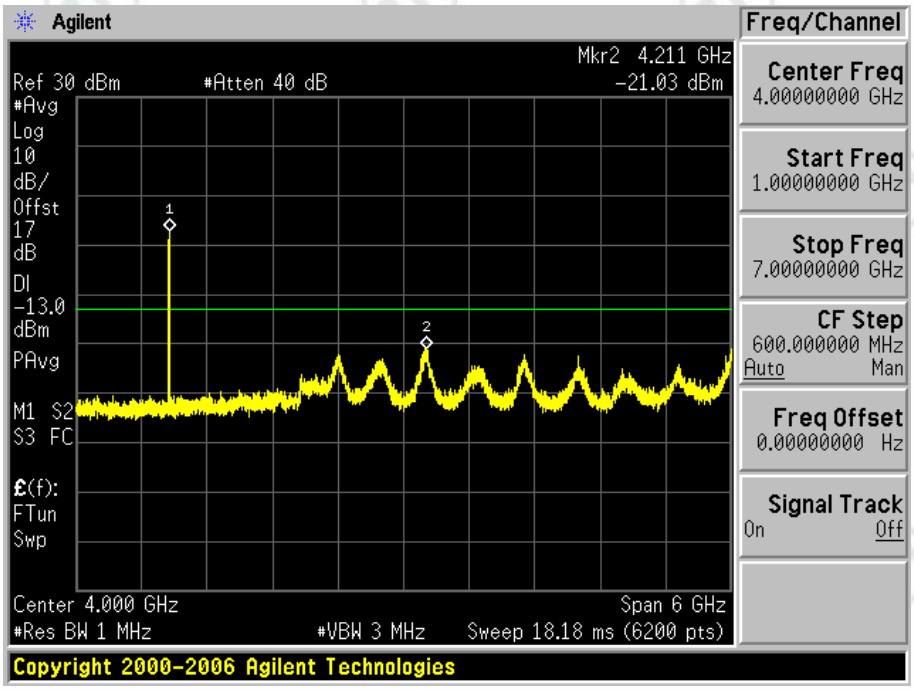
2.2.1 Test Mode=UMTS/TM1

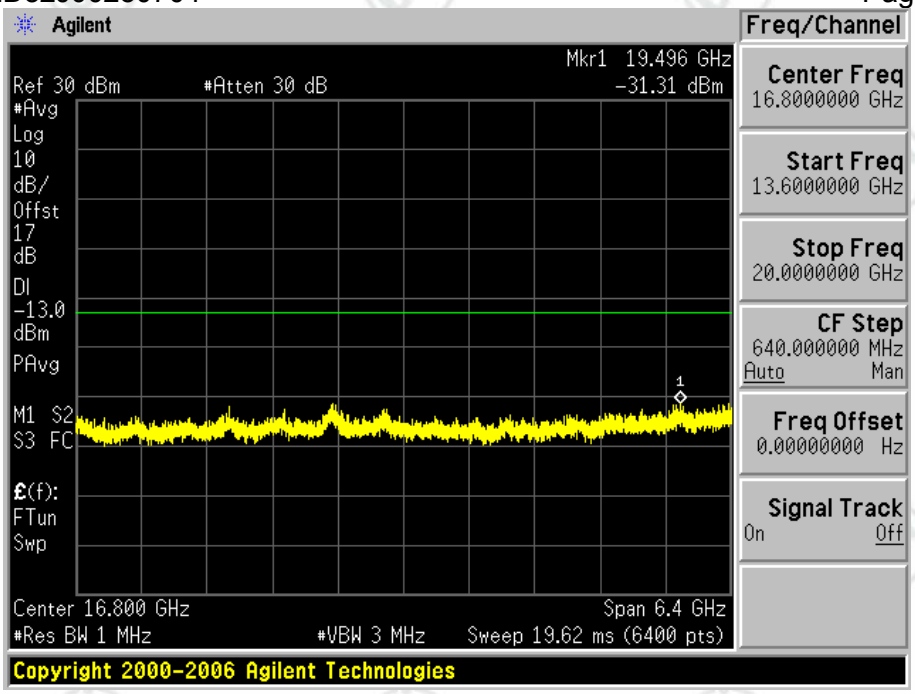
2.2.1.1 Test Channel=LCH

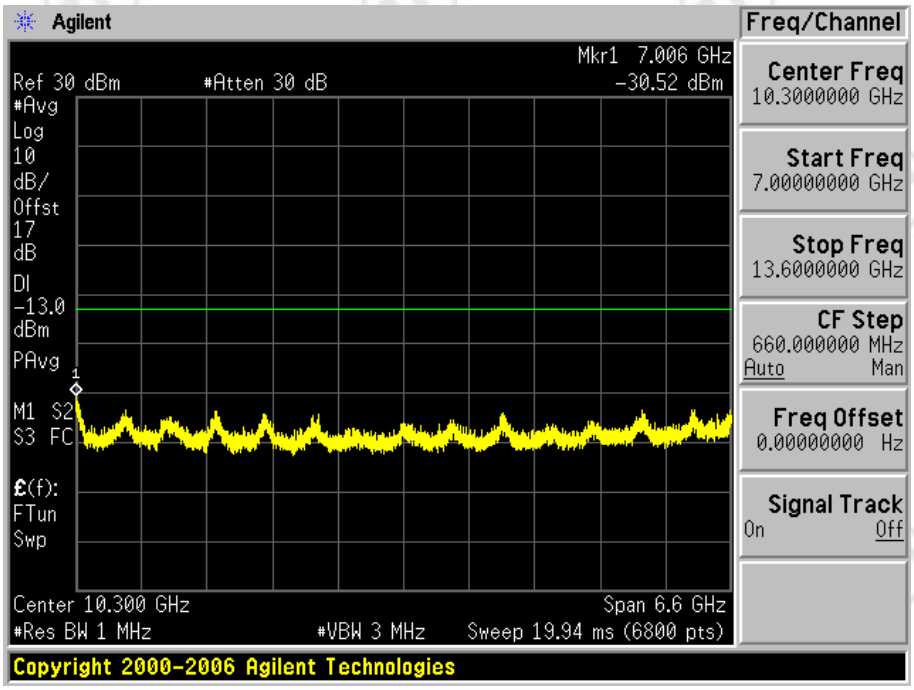




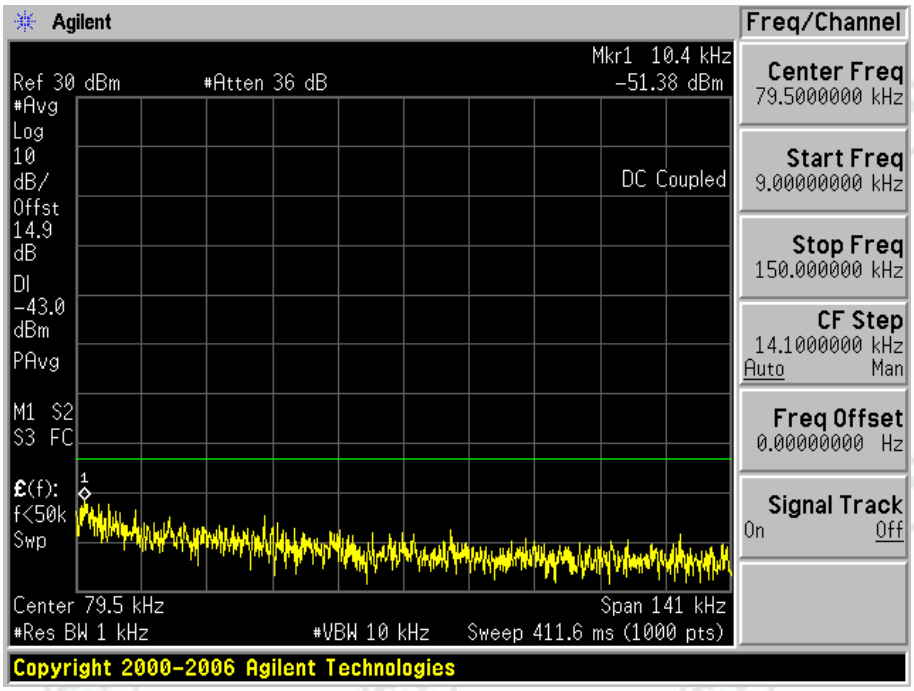

Agilent
Freq/Channel
Mkr1 436.8 MHz
Ref 30 dBm
#Atten 30 dB
-41.87 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

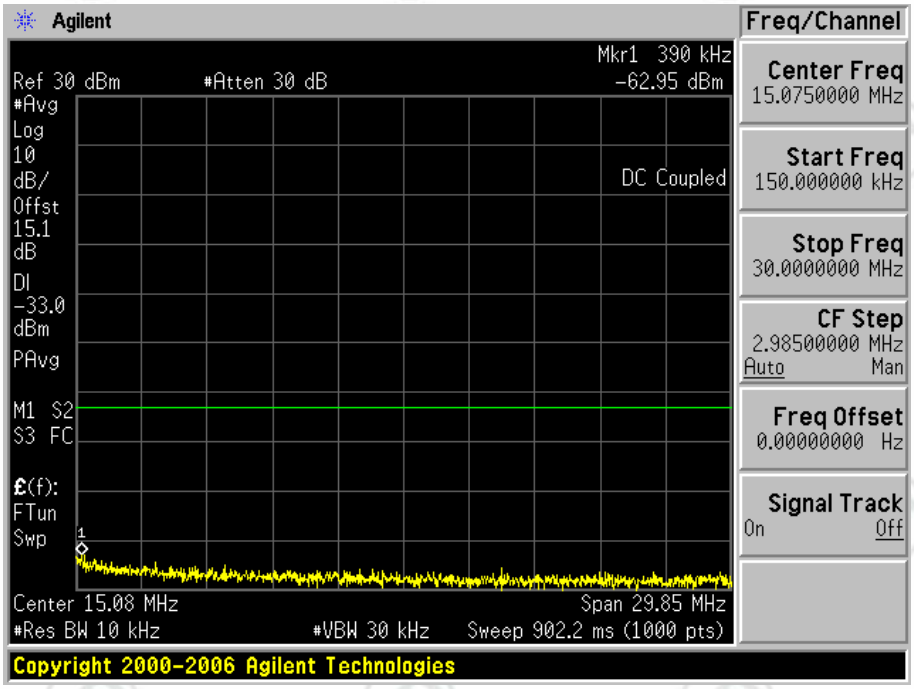

Agilent
Freq/Channel
Mkr2 4.211 GHz
Ref 30 dBm
#Atten 40 dB
-21.03 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

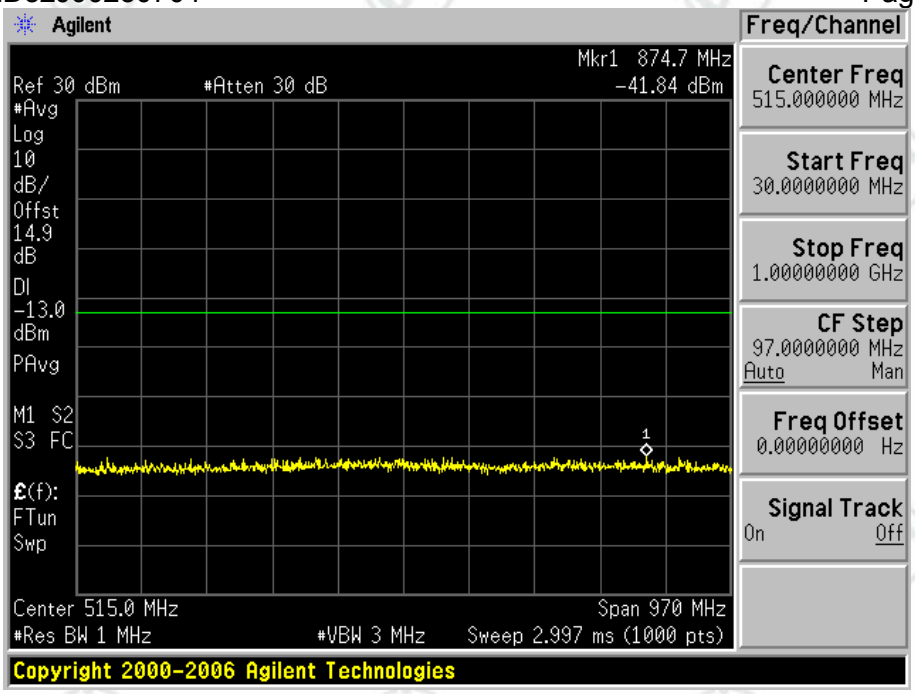

Agilent
Freq/Channel
Mkr1 19.496 GHz
Ref 30 dBm
#Atten 30 dB
-31.31 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

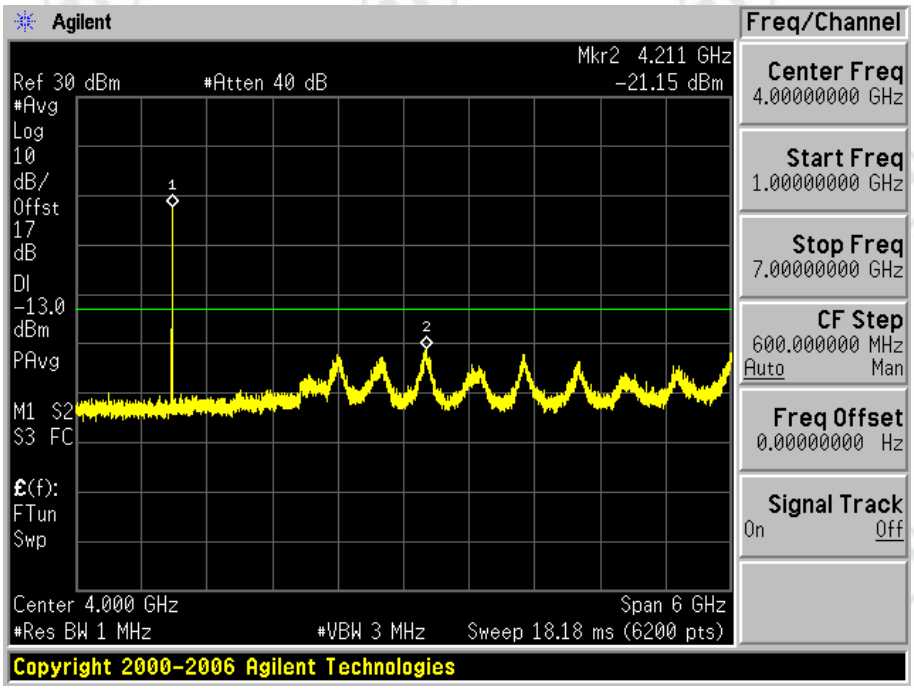

Agilent
Freq/Channel
Mkr1 7.006 GHz
Ref 30 dBm
#Atten 30 dB
-30.52 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

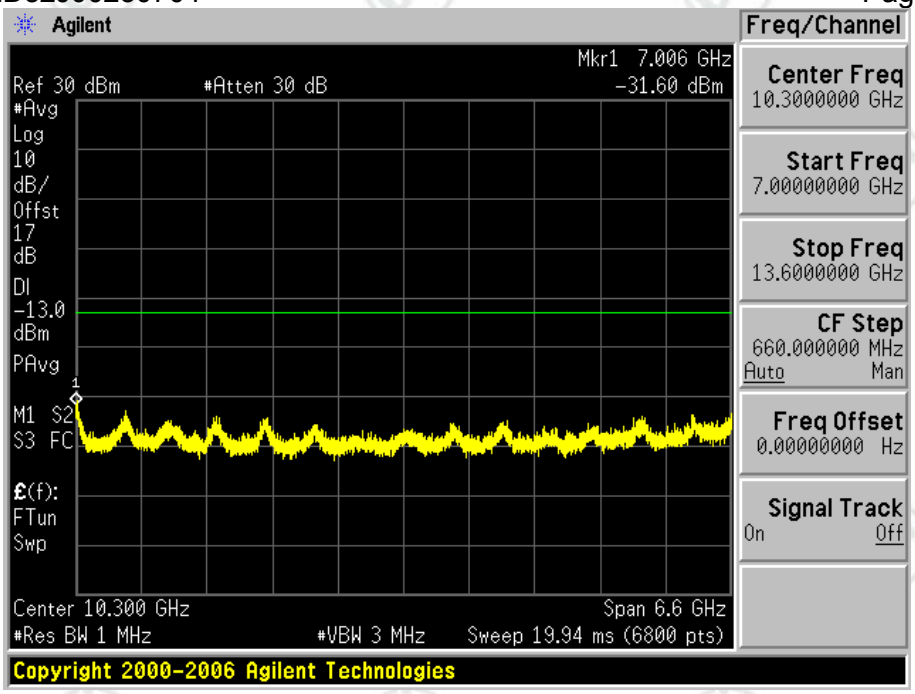
2.2.1.2 Test Channel=MCH

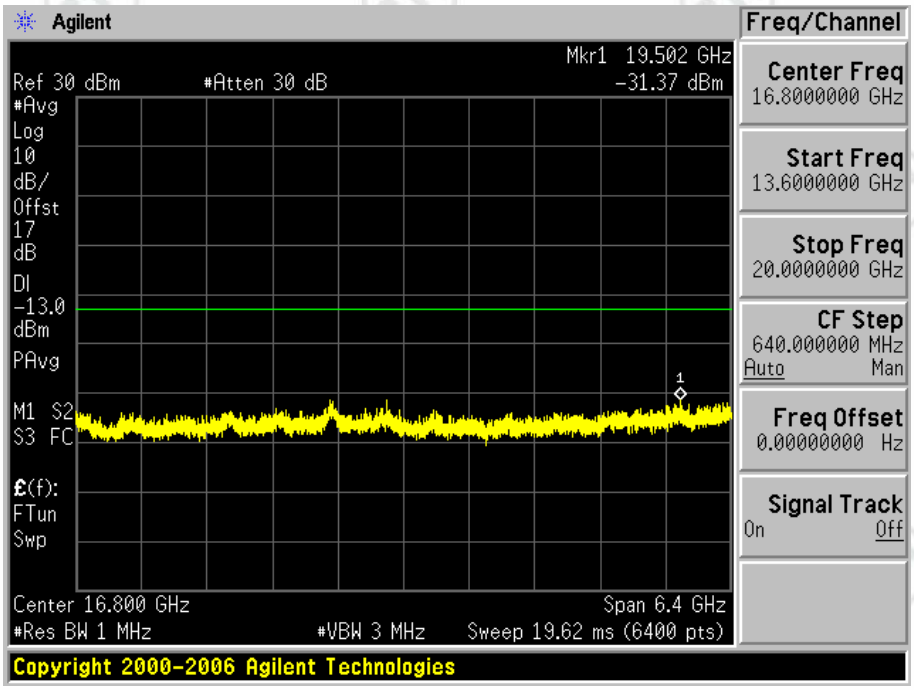




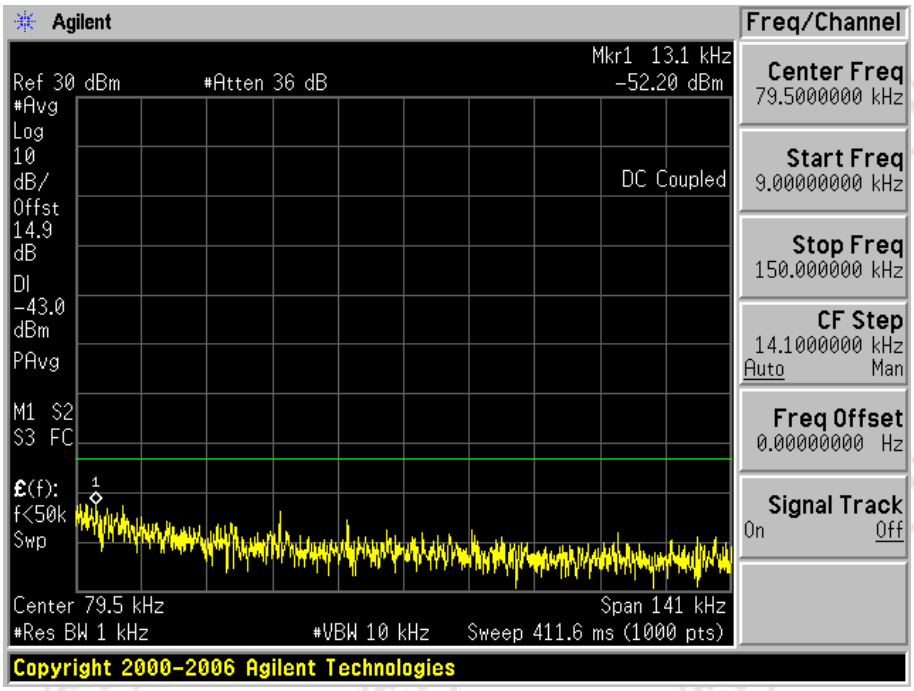

Agilent
Freq/Channel
Mkr1 874.7 MHz
Ref 30 dBm
#Atten 30 dB
-41.84 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

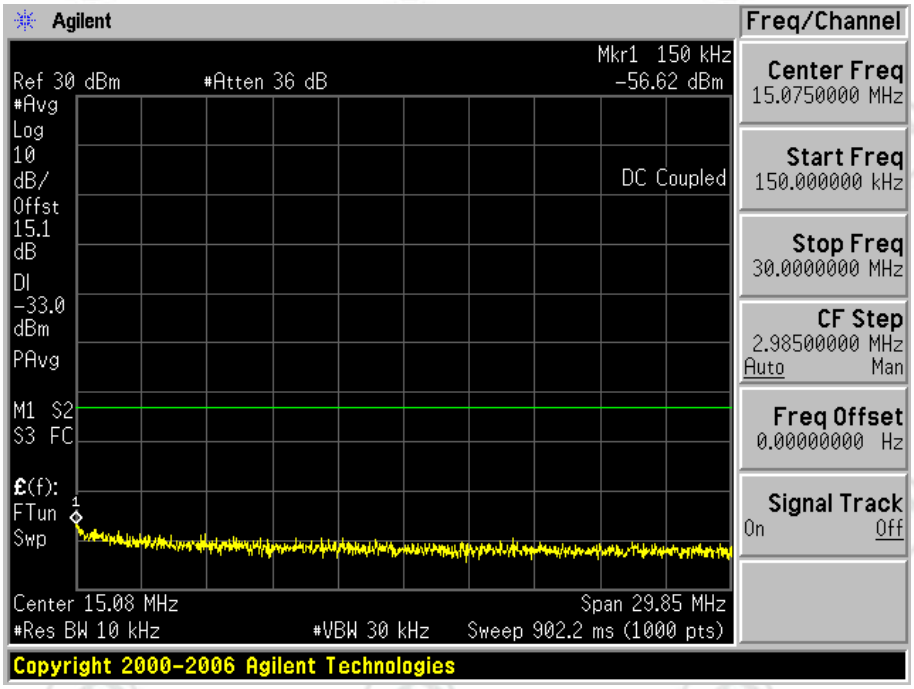

Agilent
Freq/Channel
Mkr2 4.211 GHz
Ref 30 dBm
#Atten 40 dB
-21.15 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

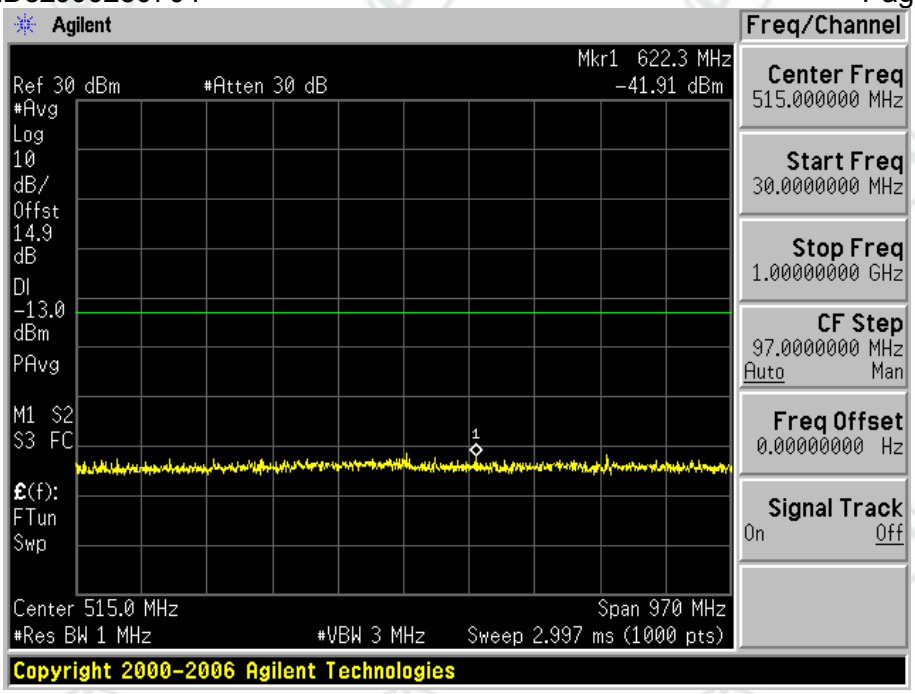

Agilent
Freq/Channel
Mkr1 7.006 GHz
Ref 30 dBm
#Atten 30 dB
-31.60 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

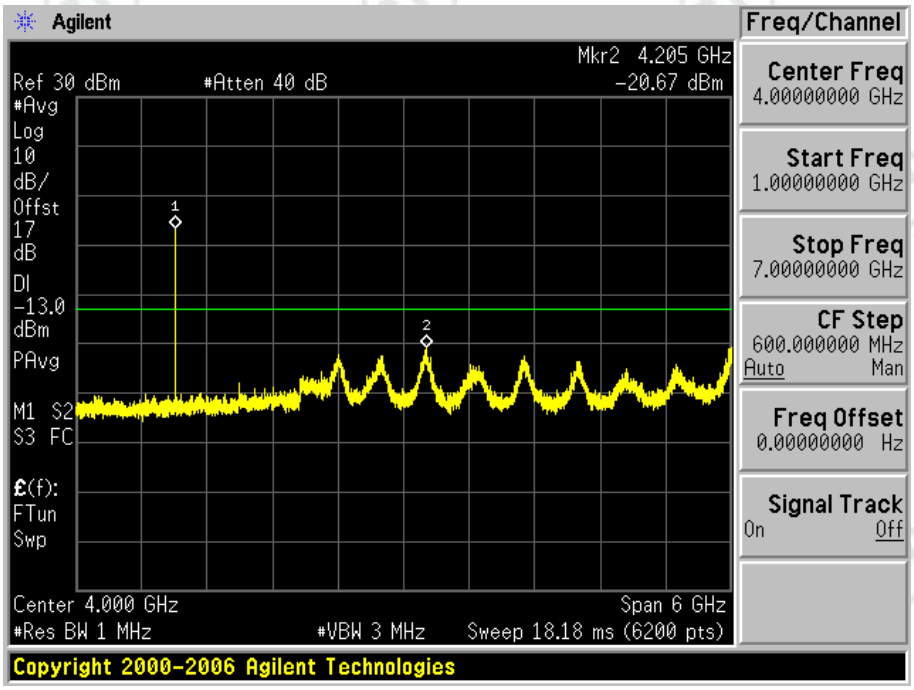

Agilent
Freq/Channel
Mkr1 19.502 GHz
Ref 30 dBm
#Atten 30 dB
-31.37 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

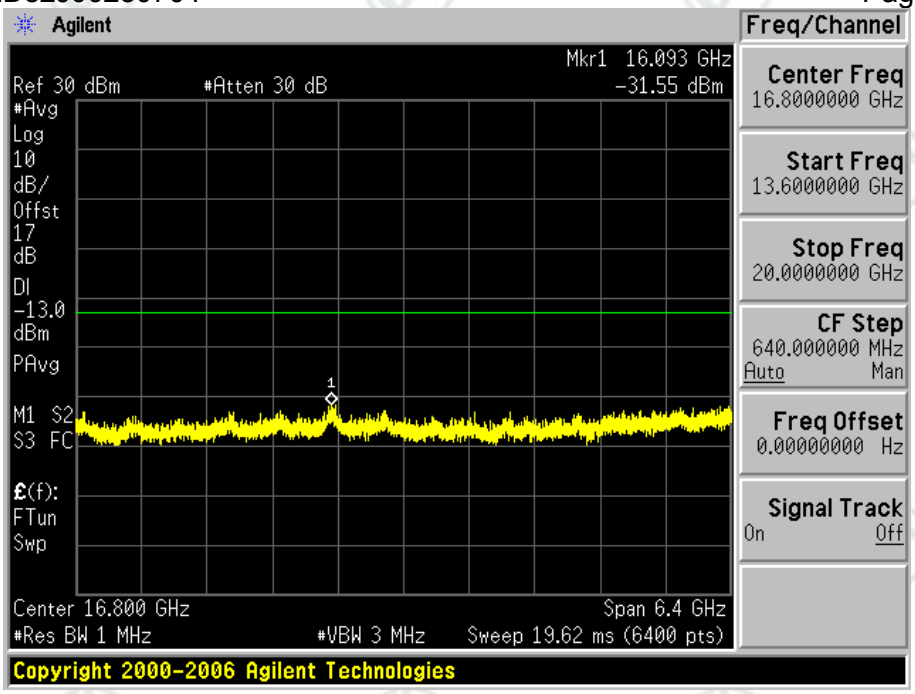
2.2.1.3 Test Channel=HCH

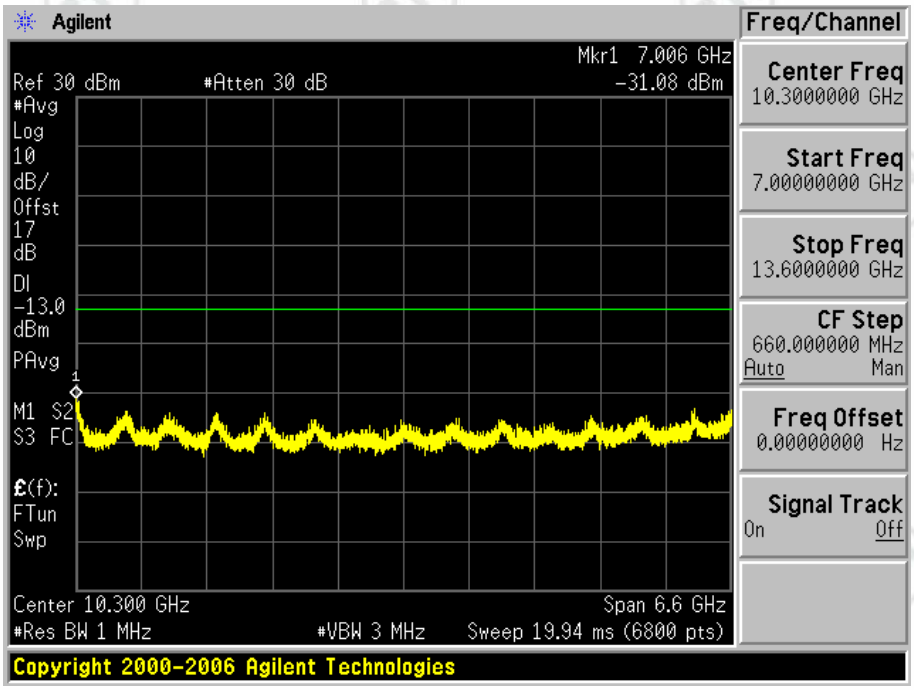





Agilent
Freq/Channel
Mkr1 622.3 MHz
Ref 30 dBm
#Atten 30 dB
-41.91 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

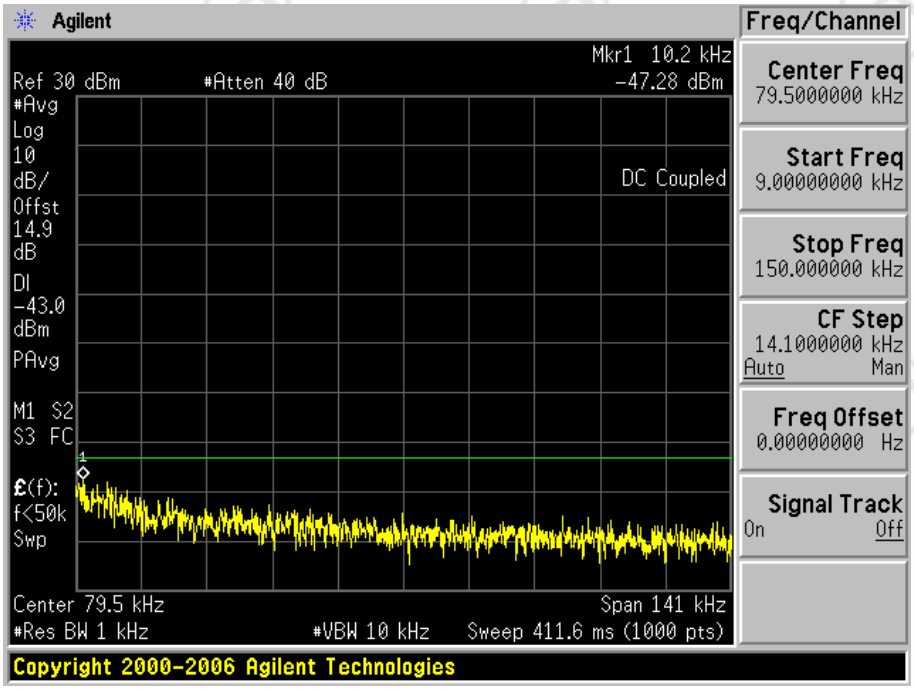

Agilent
Freq/Channel
Mkr2 4.205 GHz
Ref 30 dBm
#Atten 40 dB
-20.67 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

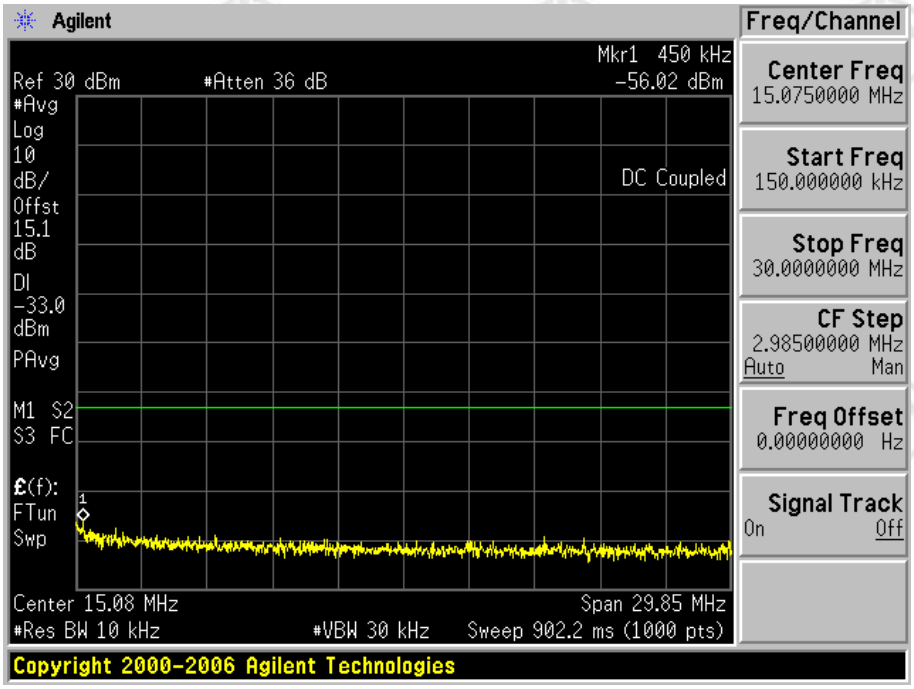

Agilent
Freq/Channel
Mkr1 16.093 GHz
Ref 30 dBm
#Atten 30 dB
-31.55 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

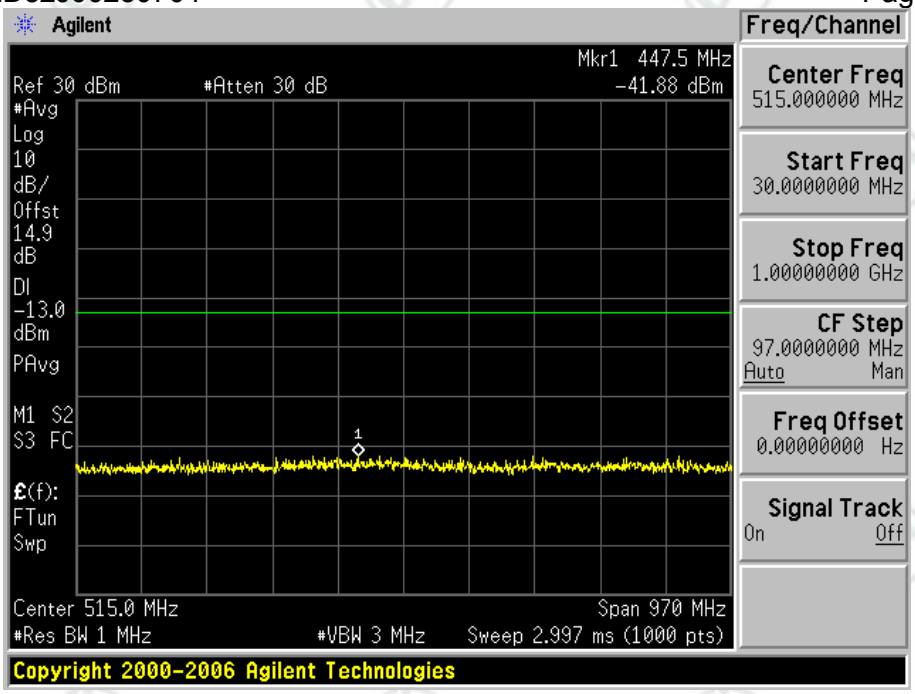

Agilent
Freq/Channel
Mkr1 7.006 GHz
Ref 30 dBm
#Atten 30 dB
-31.08 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

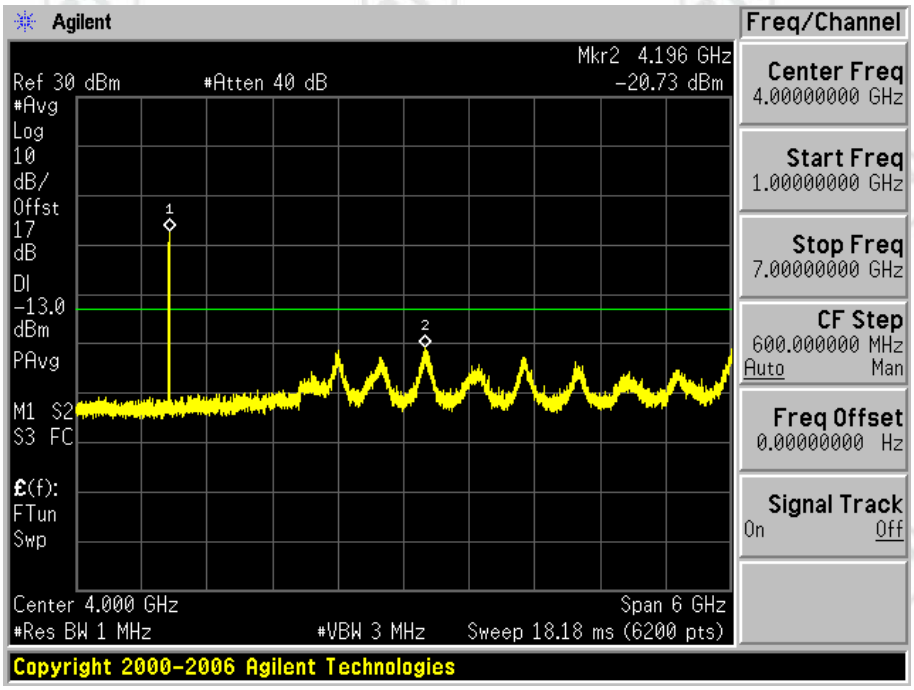
2.2.2 Test Mode=UMTS/TM2

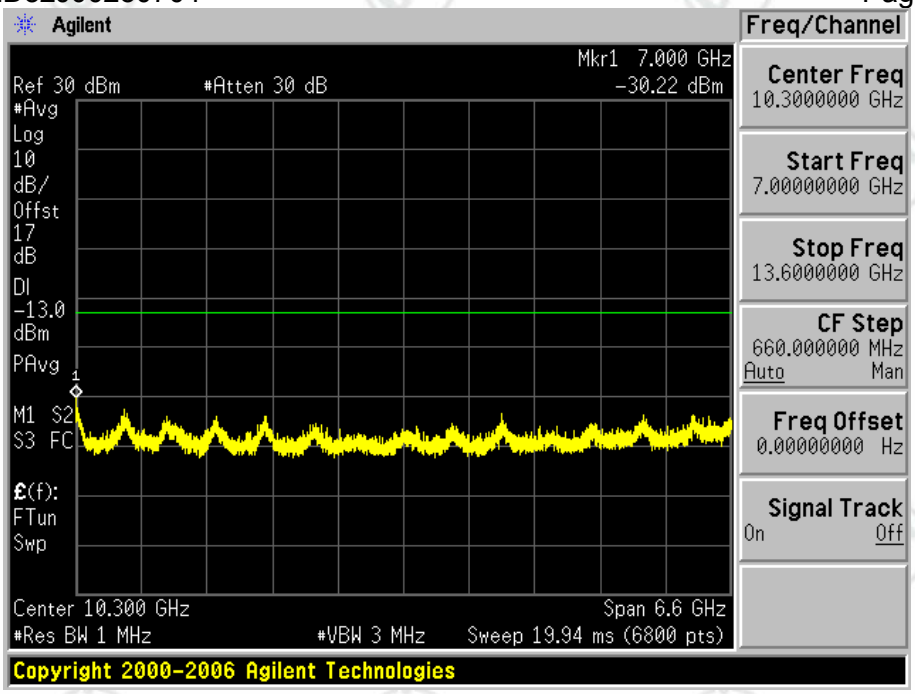
2.2.2.1 Test Channel=LCH

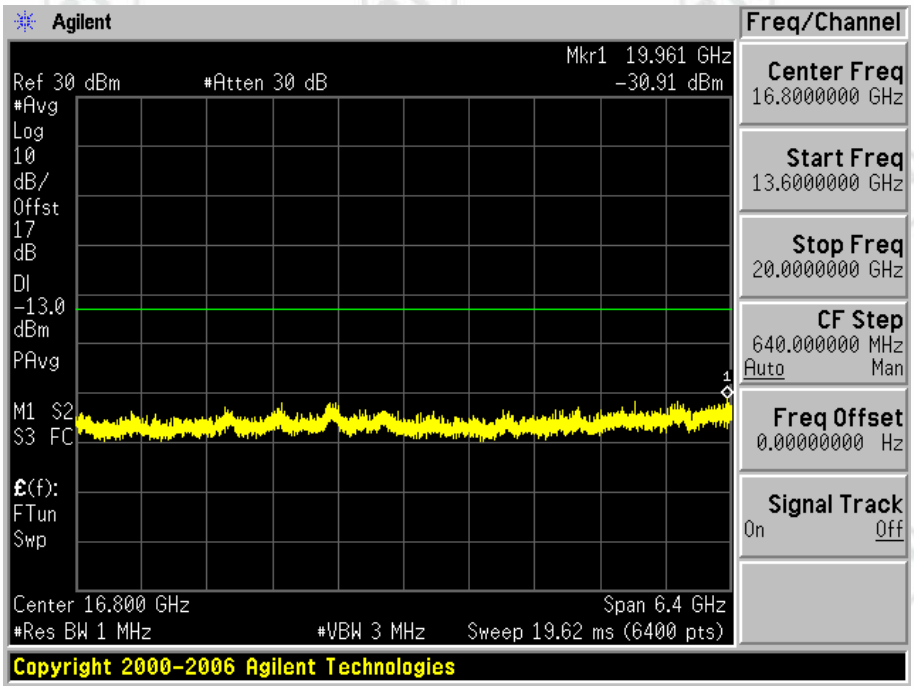




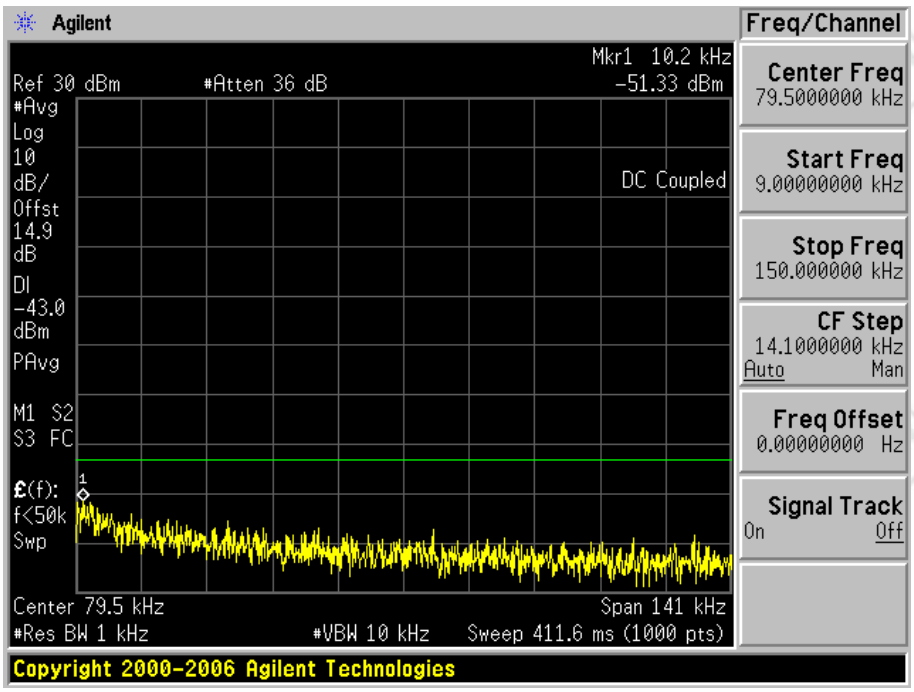

Agilent
Freq/Channel
Mkr1 447.5 MHz
Ref 30 dBm
#Atten 30 dB
-41.88 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

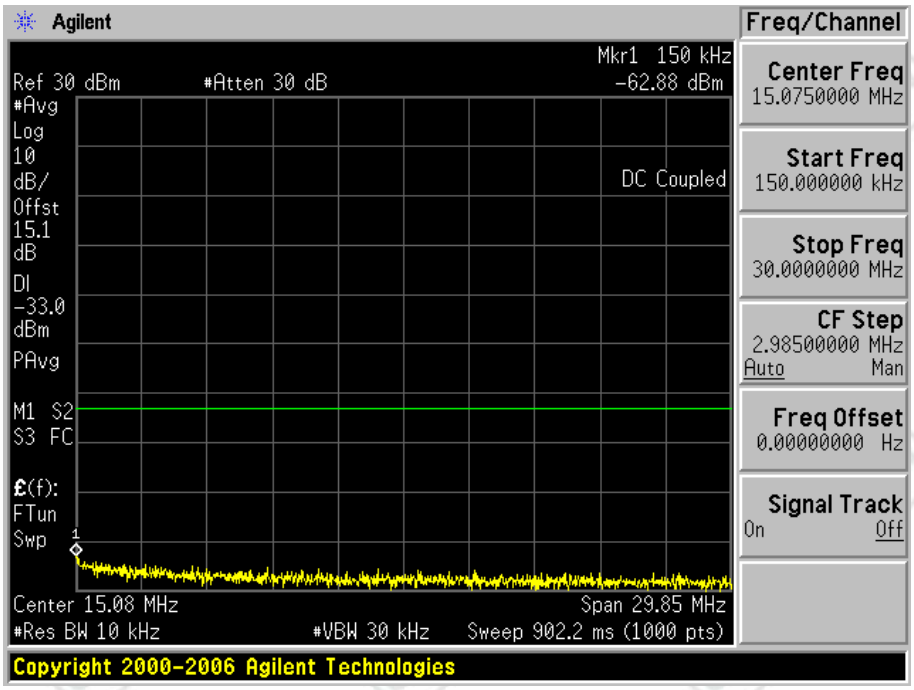

Agilent
Freq/Channel
Mkr2 4.196 GHz
Ref 30 dBm
#Atten 40 dB
-20.73 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

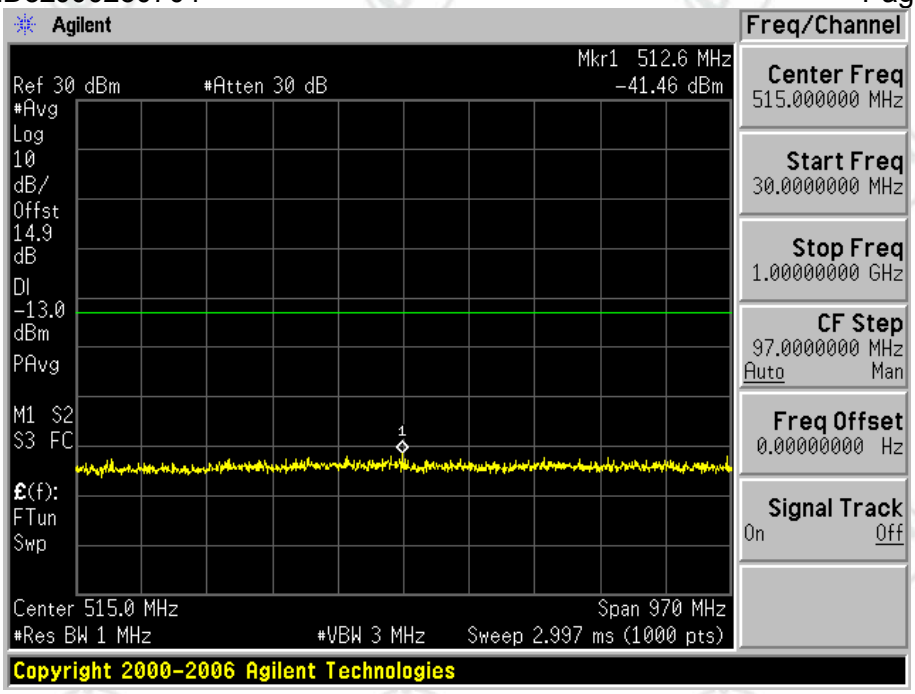

Agilent
Freq/Channel
Mkr1 7.000 GHz
Ref 30 dBm
#Atten 30 dB
-30.22 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

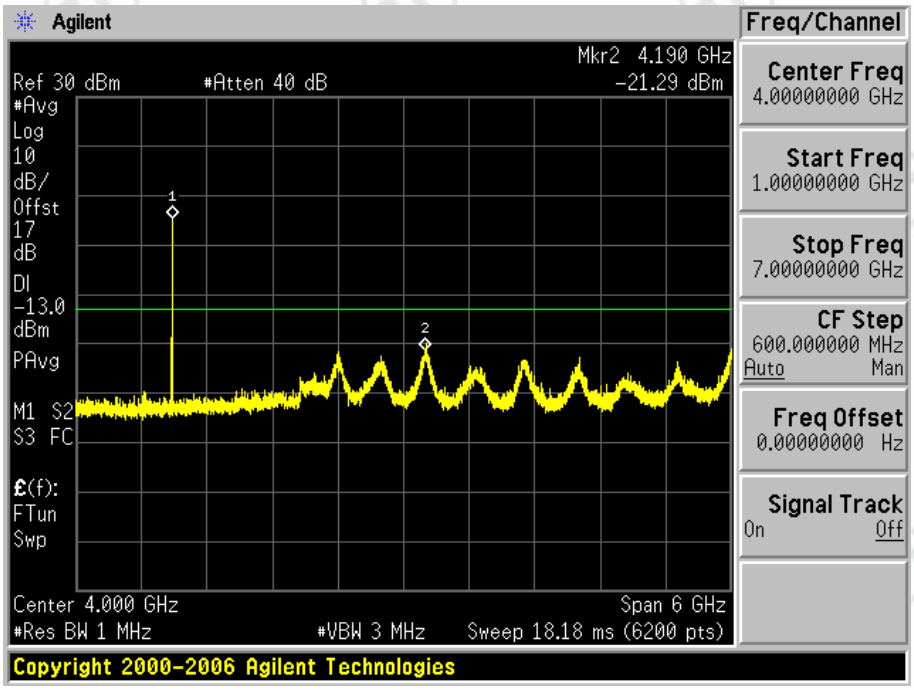

Agilent
Freq/Channel
Mkr1 19.961 GHz
Ref 30 dBm
#Atten 30 dB
-30.91 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

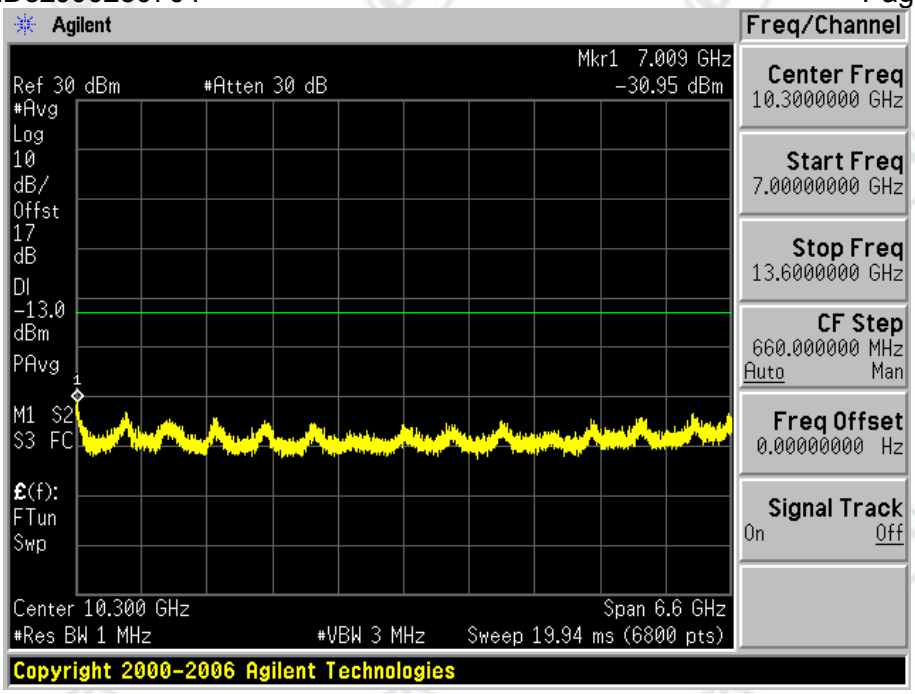
2.2.2.2 Test Channel=MCH

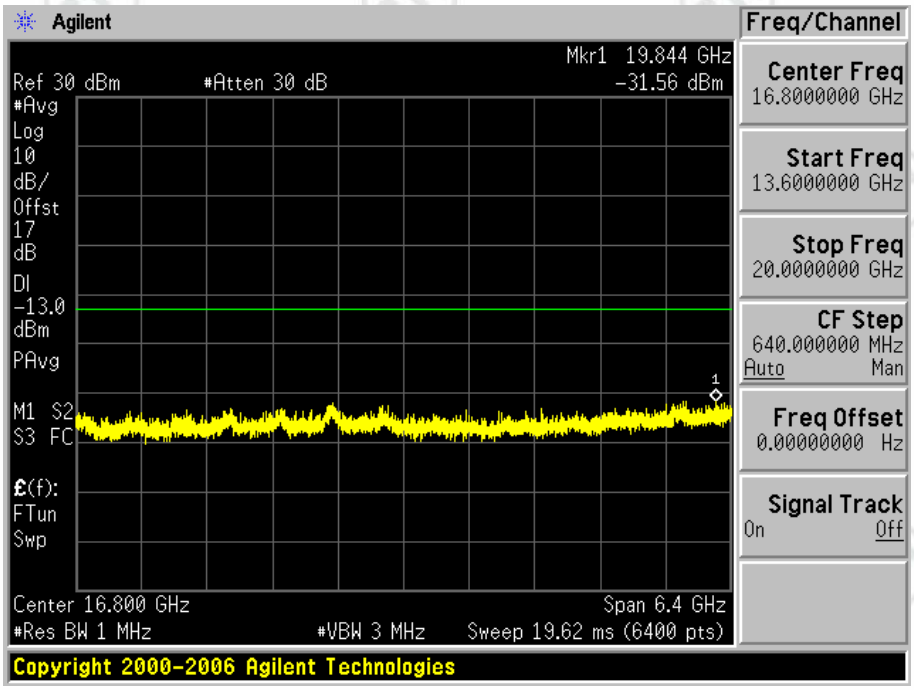




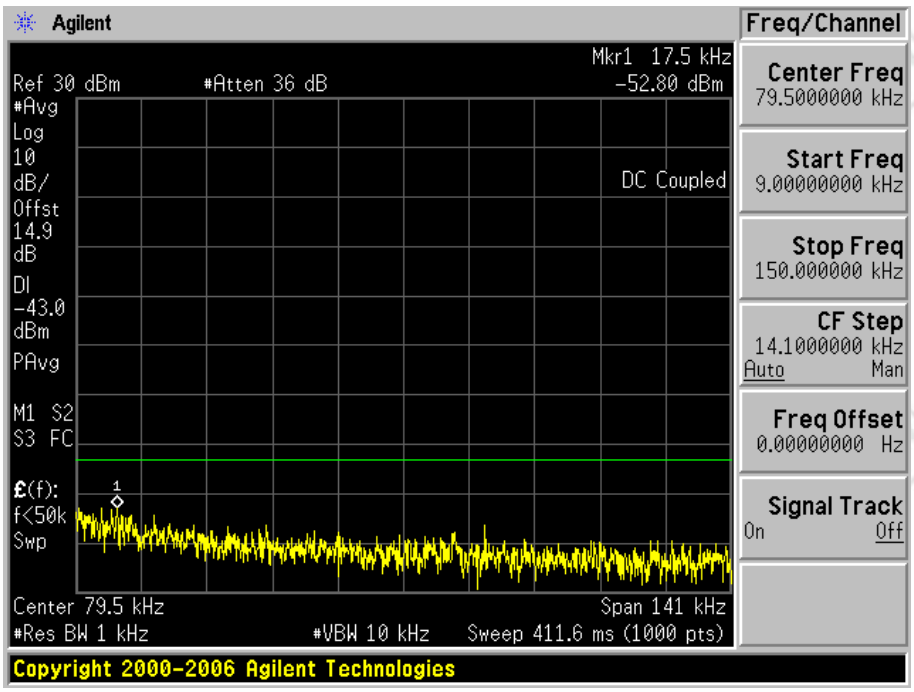

Agilent
Freq/Channel
Mkr1 512.6 MHz
Ref 30 dBm
#Atten 30 dB
-41.46 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

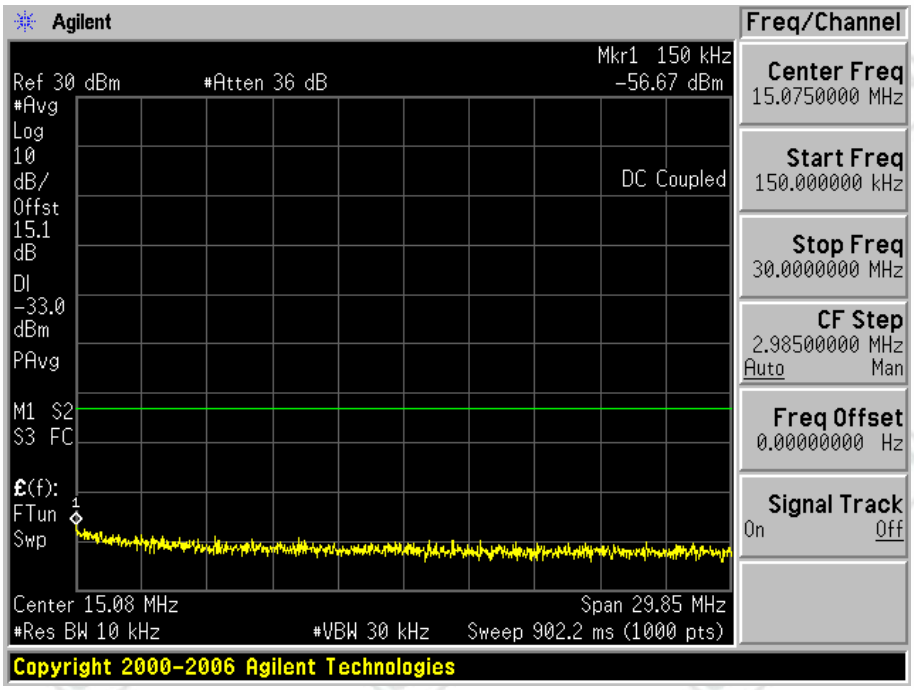

Agilent
Freq/Channel
Mkr2 4.190 GHz
Ref 30 dBm
#Atten 40 dB
-21.29 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

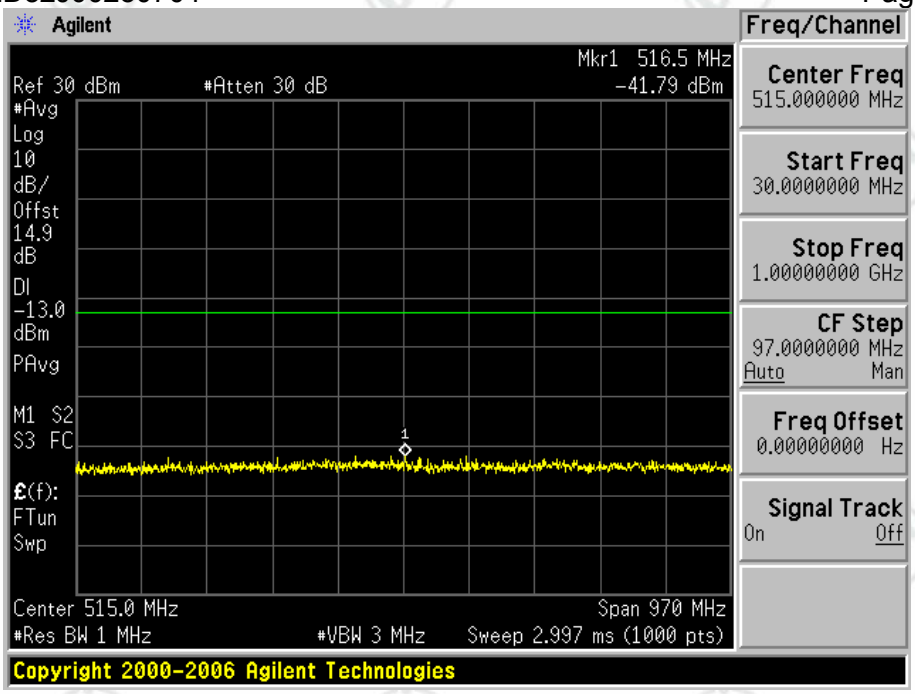

Agilent
Freq/Channel
Mkr1 7.009 GHz
Ref 30 dBm
#Atten 30 dB
-30.95 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

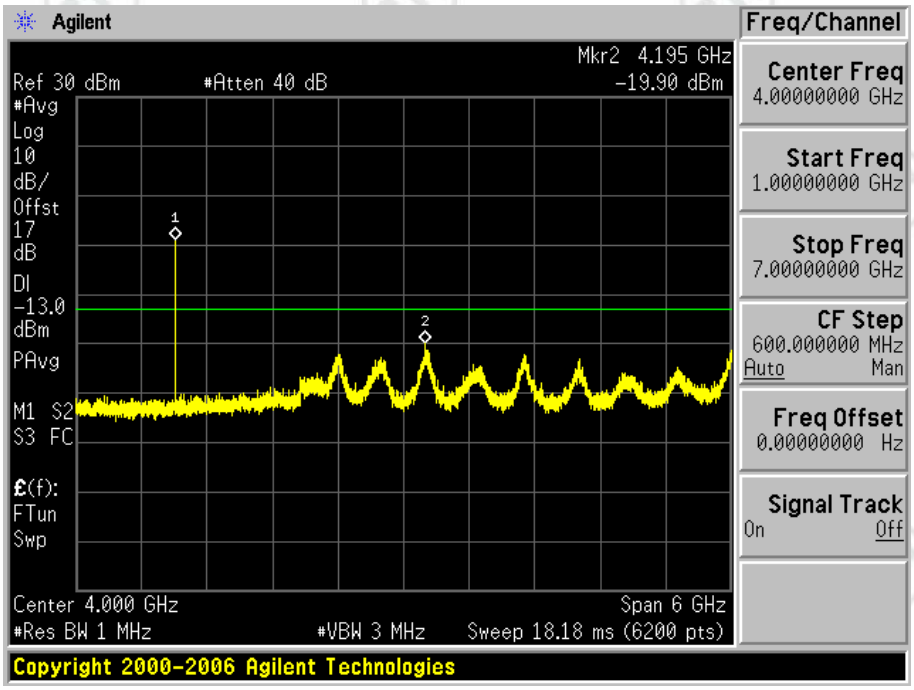

Agilent
Freq/Channel
Mkr1 19.844 GHz
Ref 30 dBm
#Atten 30 dB
-31.56 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

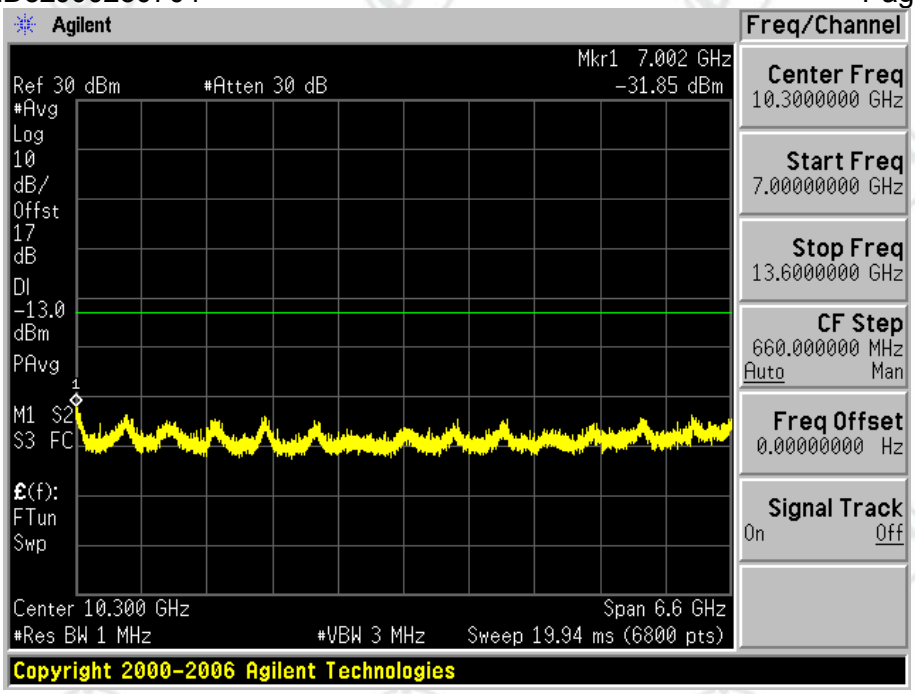
2.2.2.3 Test Channel=HCH

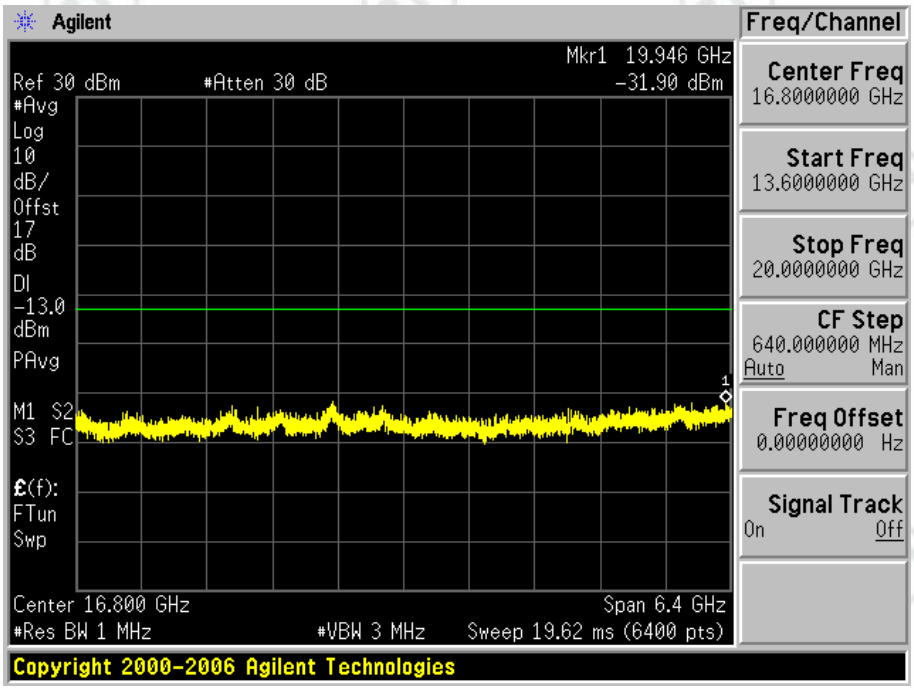





Agilent
Freq/Channel
Mkr1 516.5 MHz
Ref 30 dBm
#Atten 30 dB
-41.79 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

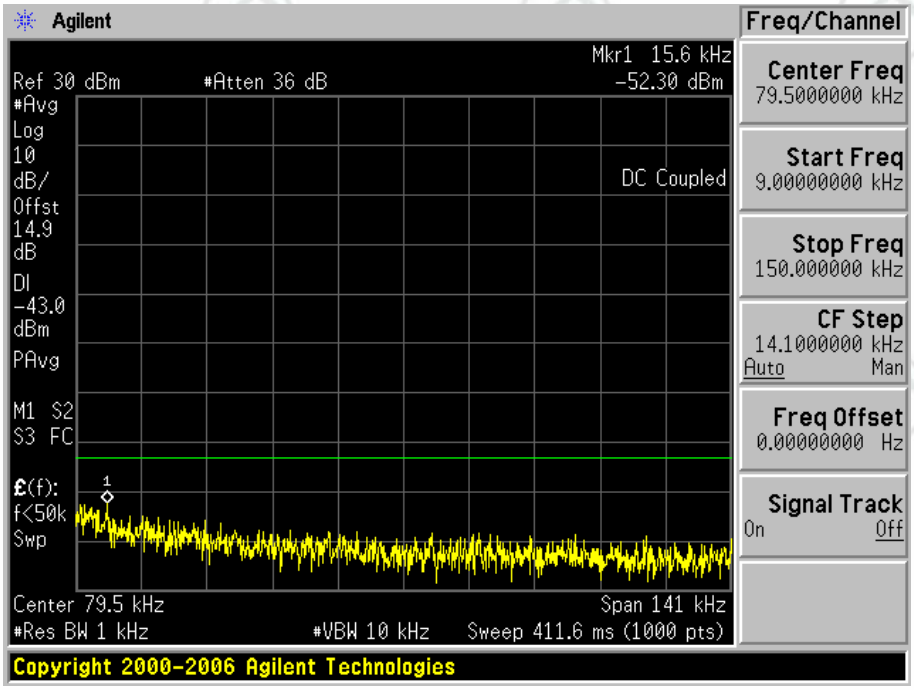

Agilent
Freq/Channel
Mkr2 4.195 GHz
Ref 30 dBm
#Atten 40 dB
-19.90 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

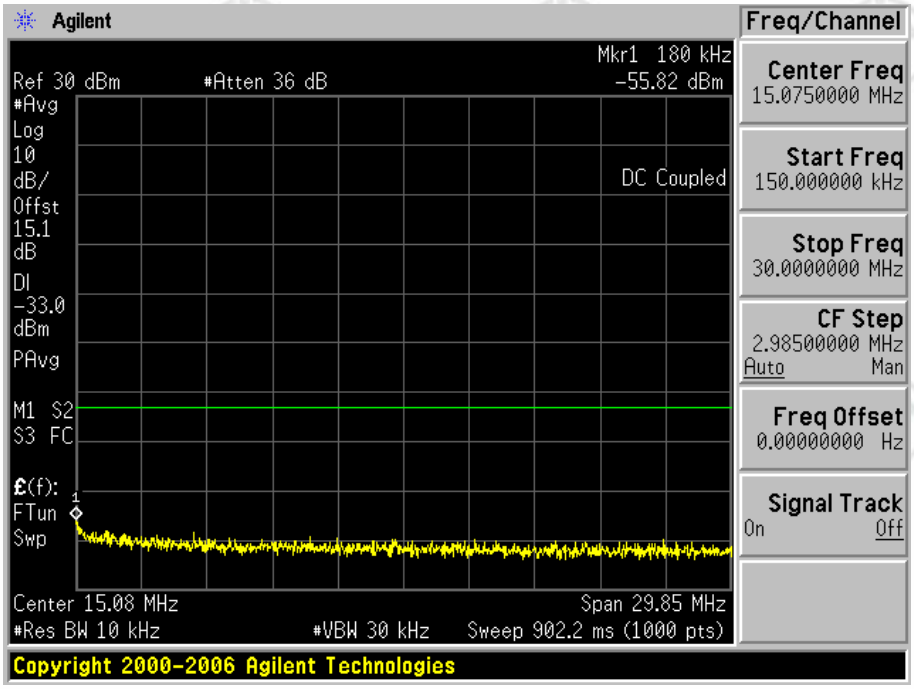

Agilent
Freq/Channel
Mkr1 7.002 GHz
Ref 30 dBm
#Atten 30 dB
-31.85 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

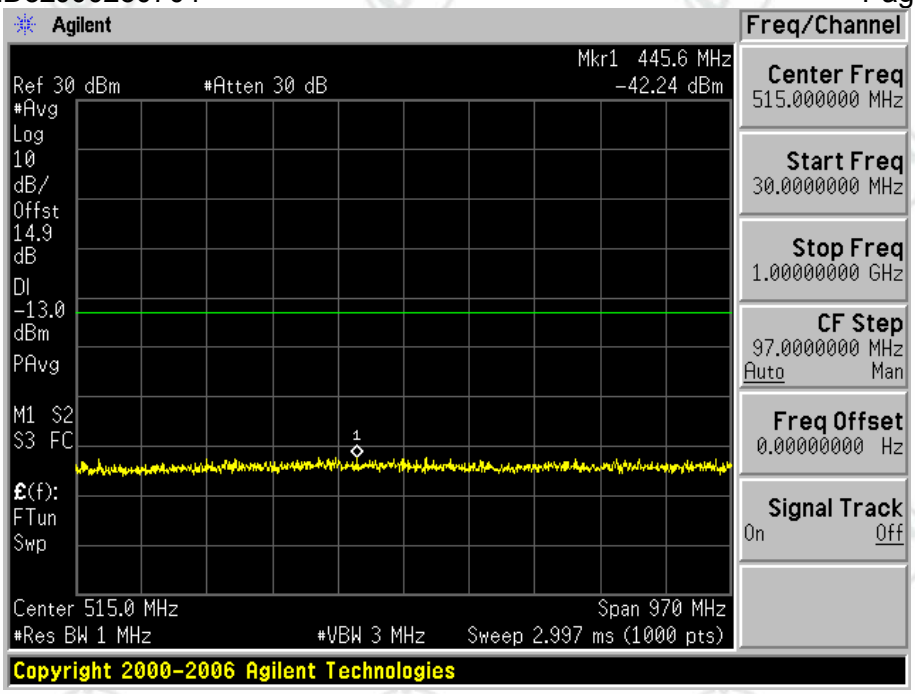

Agilent
Freq/Channel
Mkr1 19.946 GHz
Ref 30 dBm
#Atten 30 dB
-31.90 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

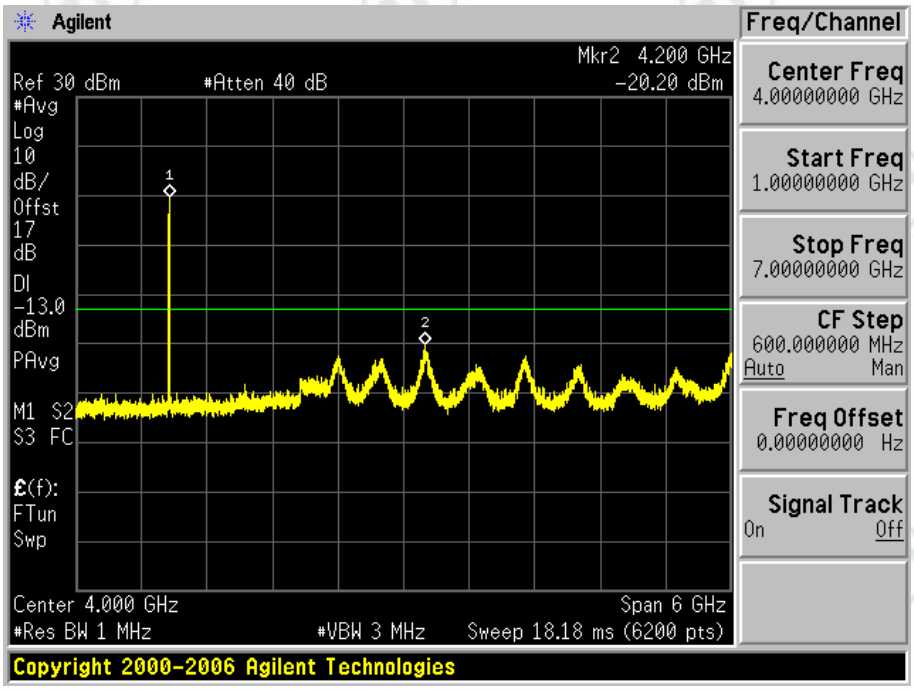
2.2.3 Test Mode=UMTS/TM3

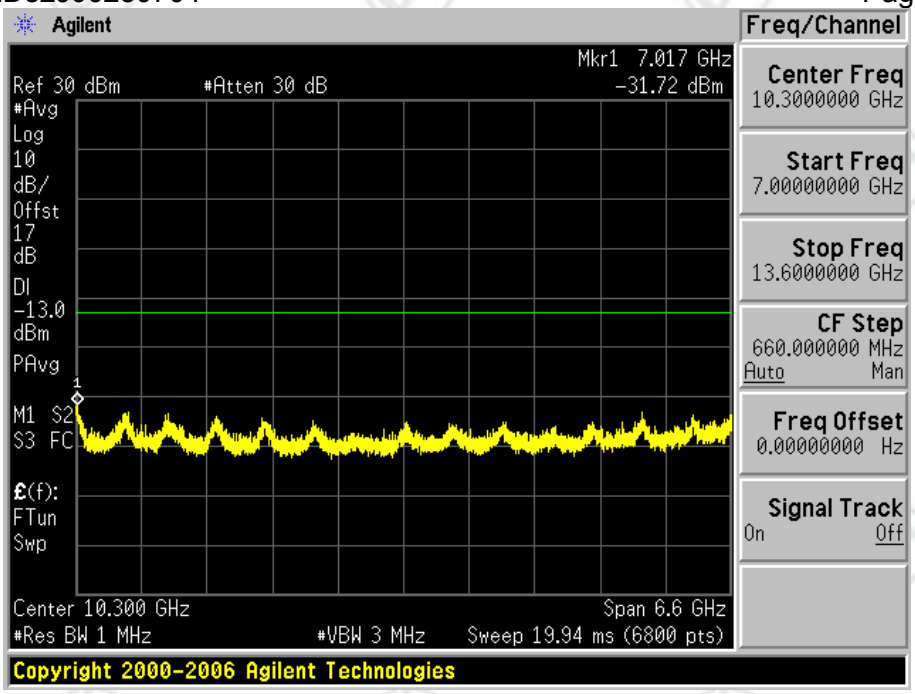
2.2.3.1 Test Channel=LCH

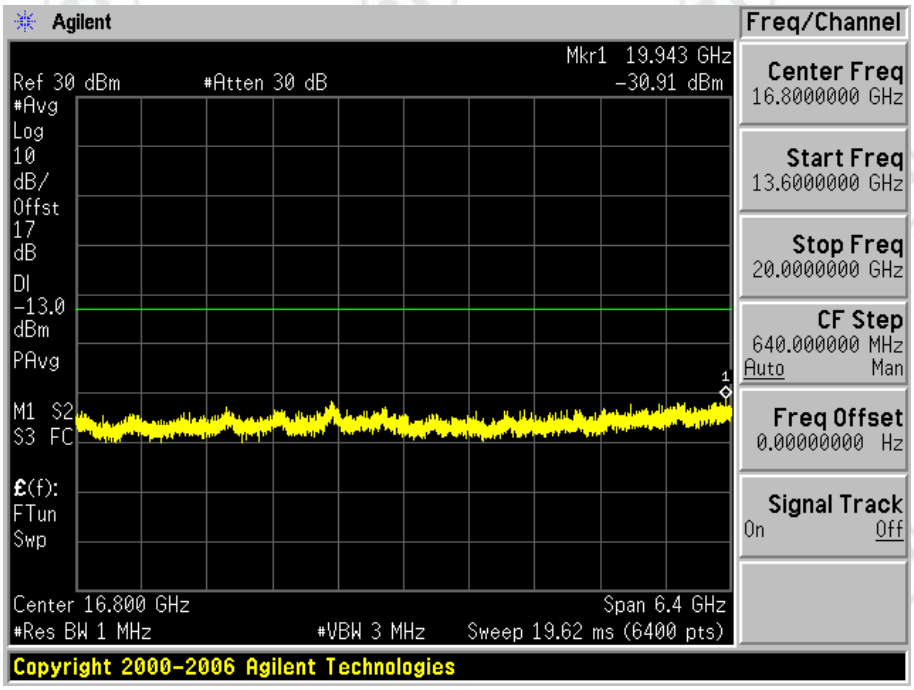




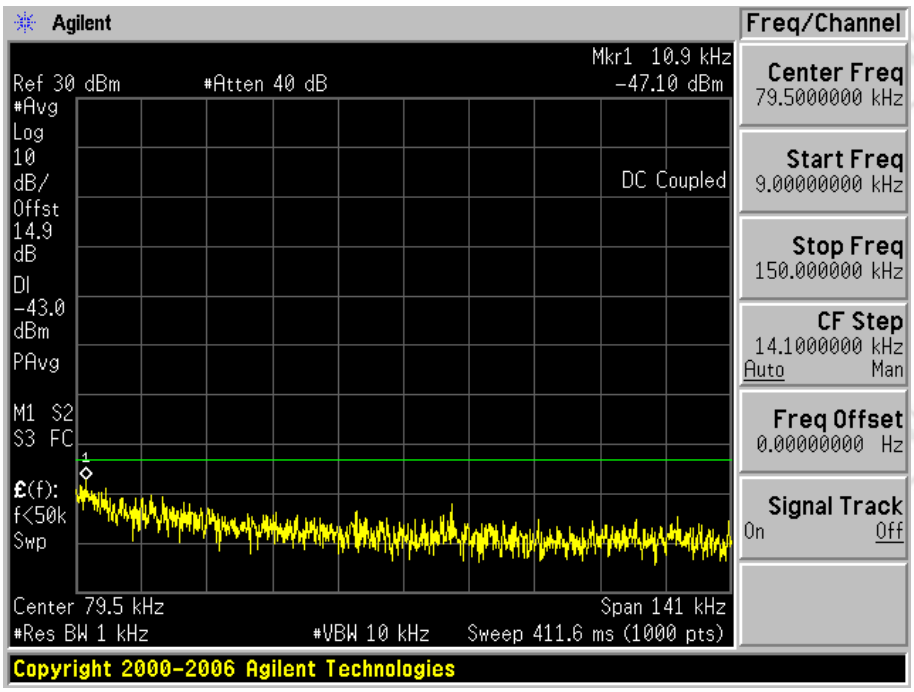

Agilent
Freq/Channel
Mkr1 445.6 MHz
Ref 30 dBm
#Atten 30 dB
-42.24 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

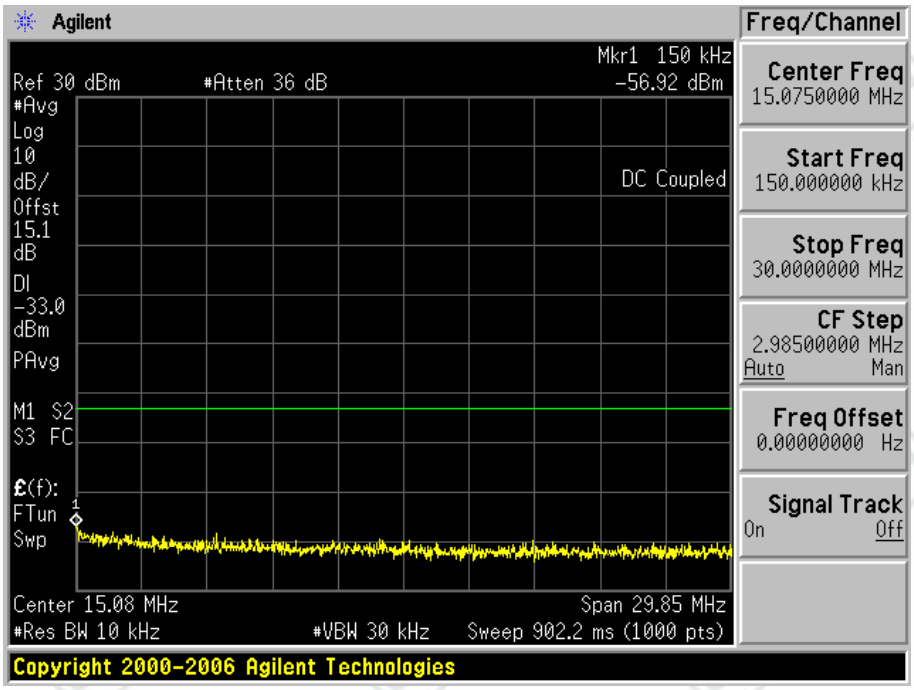

Agilent
Freq/Channel
Mkr2 4.200 GHz
Ref 30 dBm
#Atten 40 dB
-20.20 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

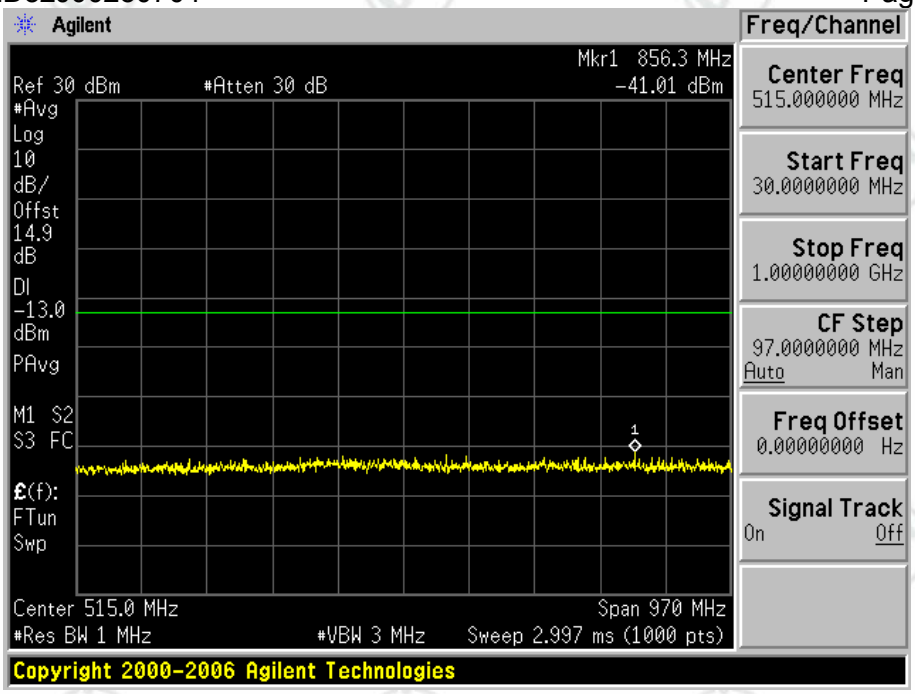

Agilent
Freq/Channel
Mkr1 7.017 GHz
Ref 30 dBm
#Atten 30 dB
-31.72 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

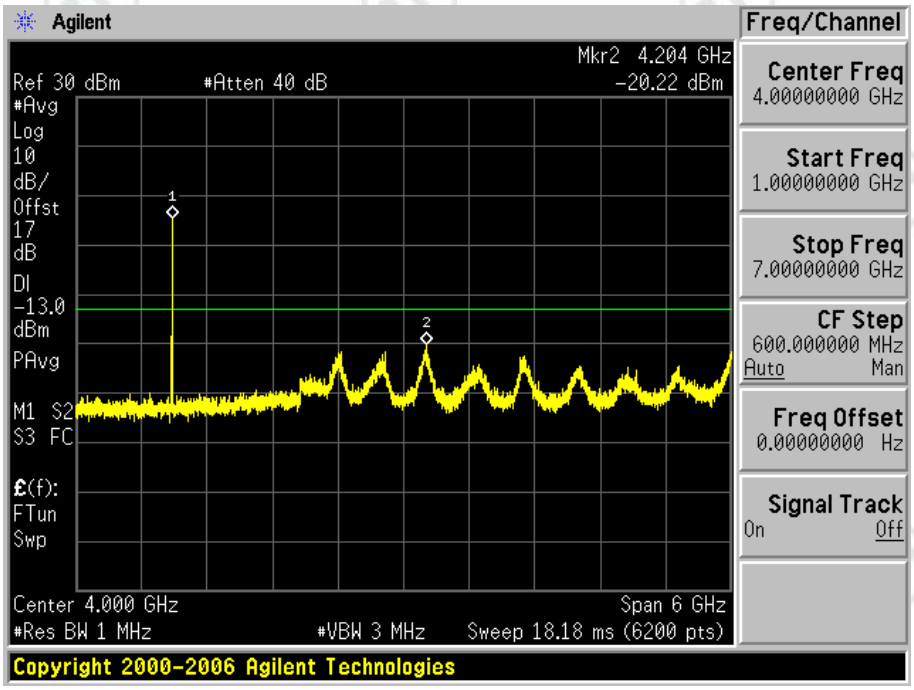

Agilent
Freq/Channel
Mkr1 19.943 GHz
Ref 30 dBm
#Atten 30 dB
-30.91 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

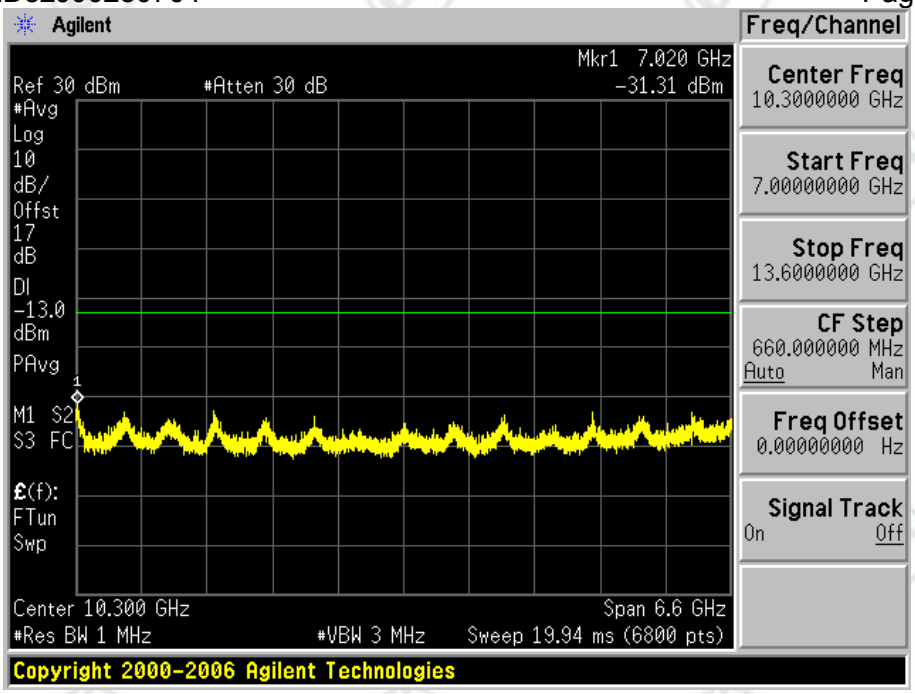
2.2.3.2 Test Channel=MCH

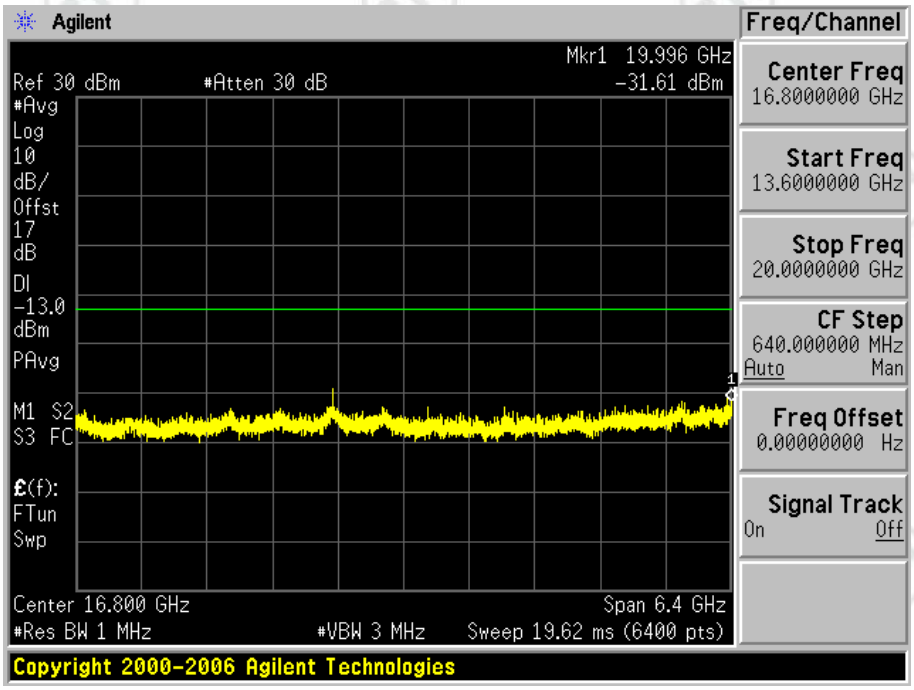




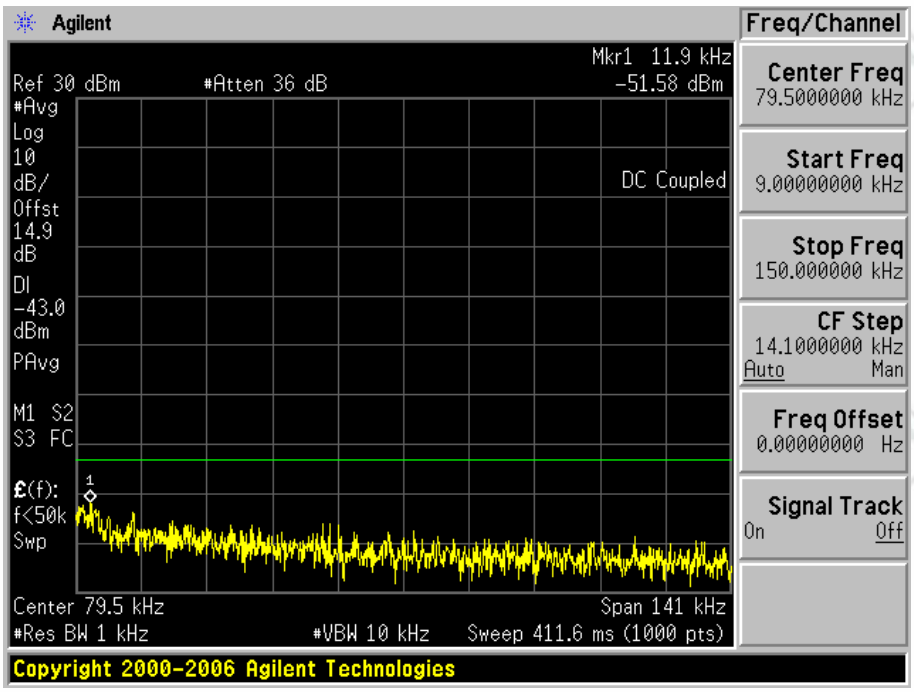

Agilent
Freq/Channel
Mkr1 856.3 MHz
Ref 30 dBm
#Atten 30 dB
-41.01 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

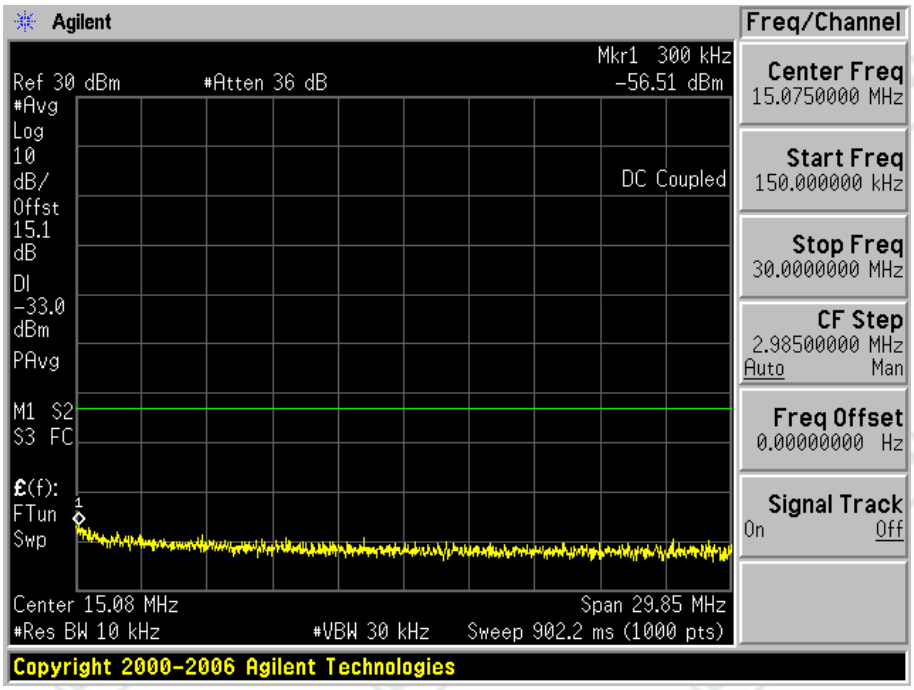

Agilent
Freq/Channel
Mkr2 4.204 GHz
Ref 30 dBm
#Atten 40 dB
-20.22 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

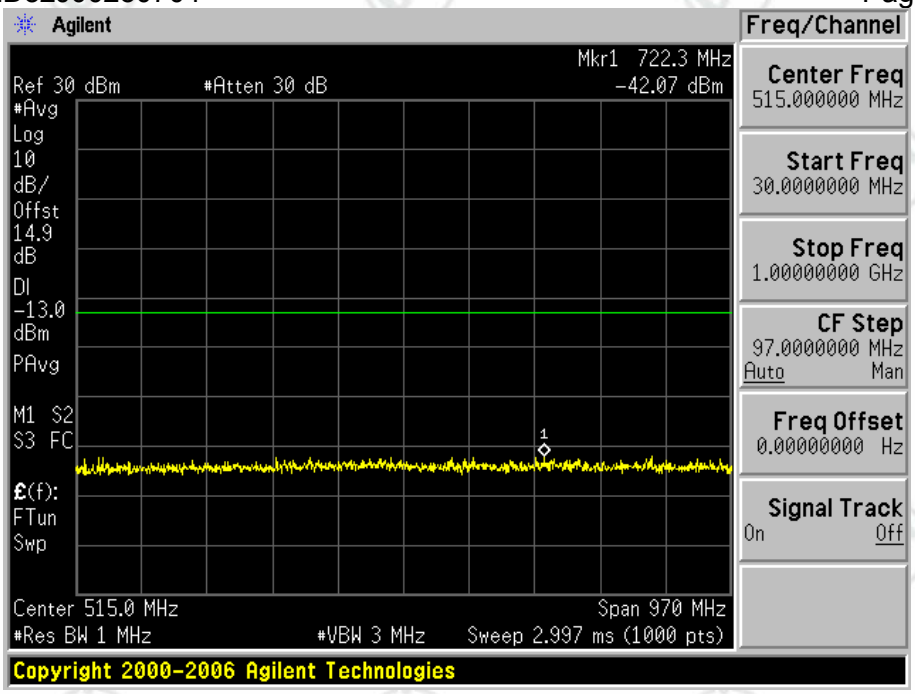

Agilent
Freq/Channel
Mkr1 7.020 GHz
Ref 30 dBm
#Atten 30 dB
-31.31 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

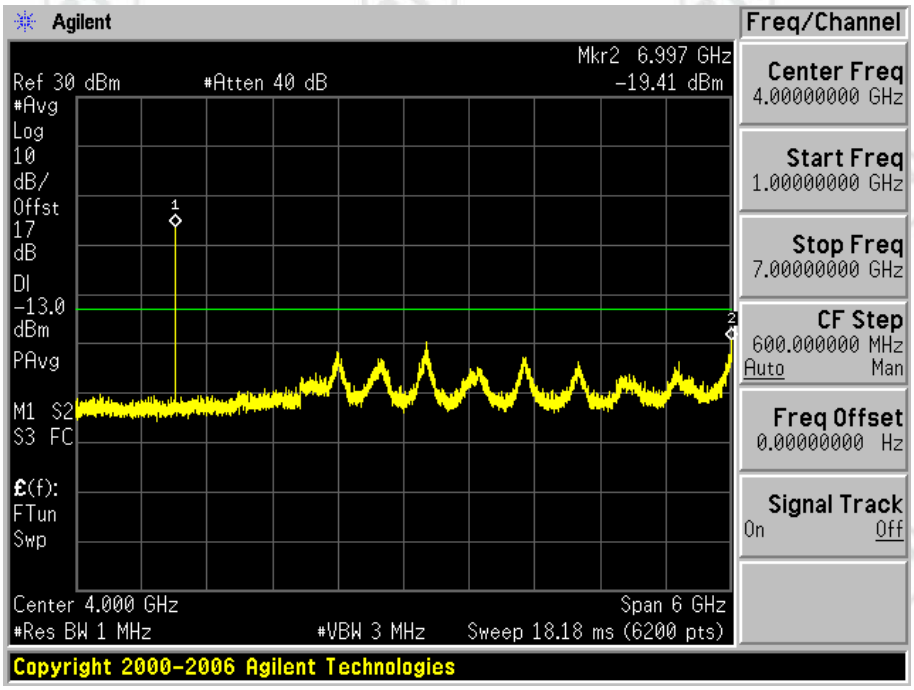

Agilent
Freq/Channel
Mkr1 19.996 GHz
Ref 30 dBm
#Atten 30 dB
-31.61 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

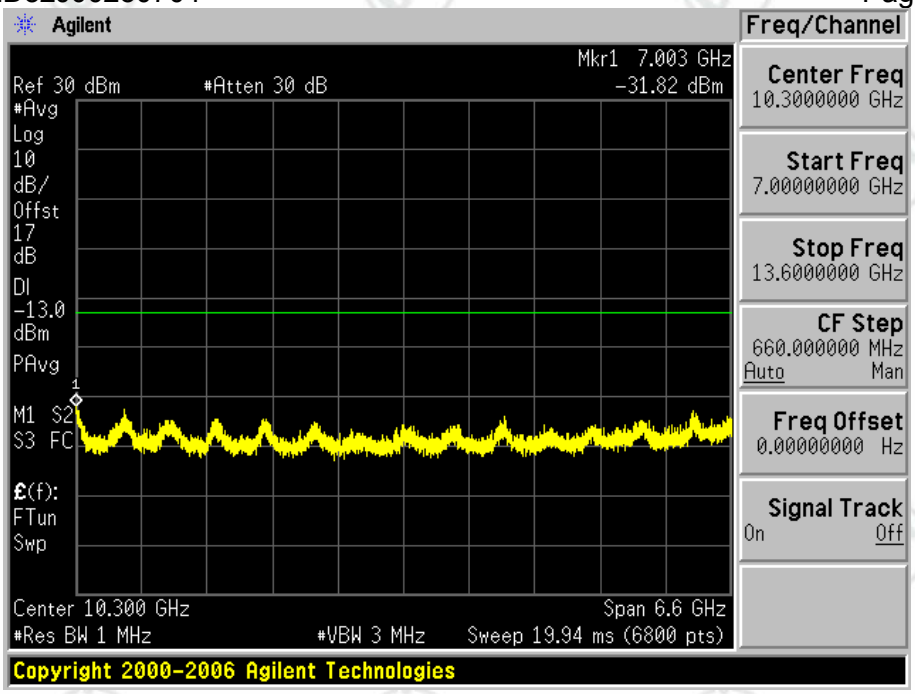
2.2.3.3 Test Channel=HCH

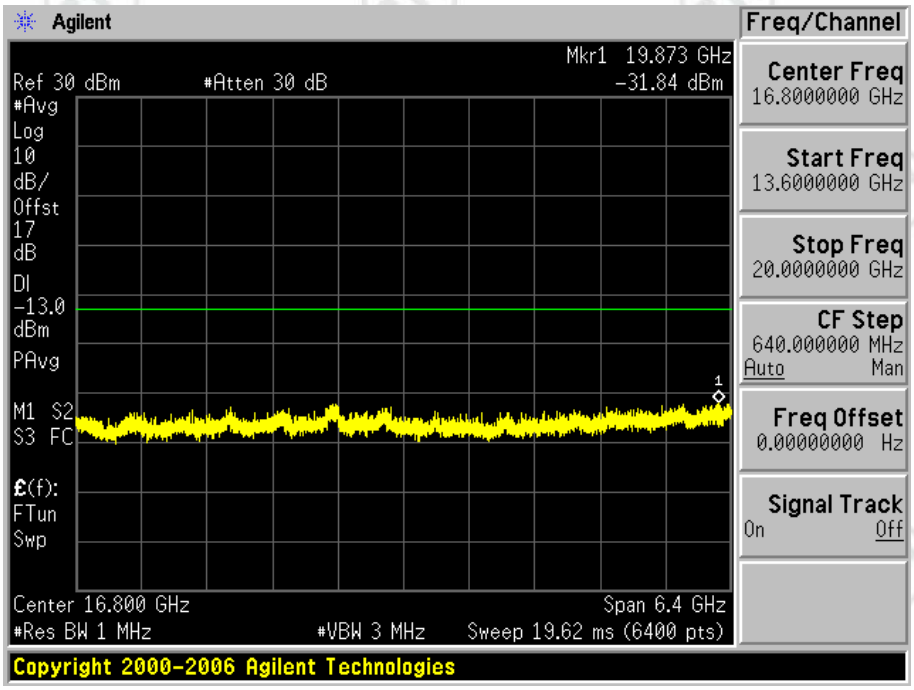





Agilent
Freq/Channel
Mkr1 722.3 MHz
Ref 30 dBm
#Atten 30 dB
-42.07 dBm
#Avg
Log
10
dB/
Offst
14.9
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 515.0 MHz
Span 970 MHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 2.997 ms (1000 pts)
Center Freq
515.000000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.00000000 GHz
CF Step
97.0000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies


Agilent
Freq/Channel
Mkr2 6.997 GHz
Ref 30 dBm
#Atten 40 dB
-19.41 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 4.000 GHz
Span 6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 18.18 ms (6200 pts)
Center Freq
4.00000000 GHz
Start Freq
1.00000000 GHz
Stop Freq
7.00000000 GHz
CF Step
600.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies


Agilent
Freq/Channel
Mkr1 7.003 GHz
Ref 30 dBm
#Atten 30 dB
-31.82 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 10.300 GHz
Span 6.6 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.94 ms (6800 pts)
Center Freq
10.3000000 GHz
Start Freq
7.00000000 GHz
Stop Freq
13.6000000 GHz
CF Step
660.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies


Agilent
Freq/Channel
Mkr1 19.873 GHz
Ref 30 dBm
#Atten 30 dB
-31.84 dBm
#Avg
Log
10
dB/
Offst
17
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 16.800 GHz
Span 6.4 GHz
#Res BW 1 MHz
#VBW 3 MHz
Sweep 19.62 ms (6400 pts)
Center Freq
16.8000000 GHz
Start Freq
13.6000000 GHz
Stop Freq
20.0000000 GHz
CF Step
640.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Copyright 2000-2006 Agilent Technologies

Appendix F): Frequency Stability

Test Requirement:	Part 2.1055
Test Method:	TIA-603-E-2016 Clause 2.2.2
Test Setup:	Refer to section 5 for details
Measurement Procedure:	The transmitter output was connected to a calibrated coaxial cable and a Base Station Simulator. The Base Station Simulator was set to force the EUT to its maximum power setting. The tests were performed at three frequencies (low channel and high channel).The EUT was place in the temperature chamber, the DC leads and RF output cable exited the chamber though an opening made for that purpose. After Operate the equipment in standby conditions for 15 minutes before proceeding. The temperature was varied from -30°C to +50°C at intervals of not more than 10°C The frequency stability was read from the base station.Since the EUT is hand carried,battery powered equipment,at 25°C the input voltage was reduced from 3.7V(primary supply voltage) to 3.3V(end point voltage), the frequency stability and input voltage was record.
Instruments Used:	Refer to section 7 for details
Limit:	Operation Band: Frequency stability Limit(ppm) GPRS/WCDMA 850: ±2.5ppm GPRS/WCDMA 1900: ---
Test Results:	Pass

Test Data:

Frequency Error vs. Voltage:

(VL is 3.3V, VN is 3.5V, VH is 3.7V)

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
GSM850	TM2	LCH	TN	VL	-0.26	-0.000315	±2.5	PASS
			TN	VN	-2.13	-0.002584	±2.5	PASS
			TN	VH	-2.52	-0.003058	±2.5	PASS
		MCH	TN	VL	-0.06	-0.000072	±2.5	PASS
			TN	VN	-3.81	-0.004554	±2.5	PASS
			TN	VH	-0.52	-0.000622	±2.5	PASS
		HCH	TN	VL	-1.42	-0.001673	±2.5	PASS
			TN	VN	-3.68	-0.004336	±2.5	PASS
			TN	VH	-4.58	-0.005396	±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	VL	1.36	0.000735	±2.5	PASS
			TN	VN	1.81	0.000978	±2.5	PASS
			TN	VH	2.84	0.001535	±2.5	PASS
		MCH	TN	VL	-1.81	-0.000963	±2.5	PASS
			TN	VN	0.77	0.000410	±2.5	PASS
			TN	VH	2.00	0.001064	±2.5	PASS
		HCH	TN	VL	-2.26	-0.001183	±2.5	PASS
			TN	VN	3.62	0.001895	±2.5	PASS
			TN	VH	-0.58	-0.000304	±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	-3.55	-0.004307	±2.5	PASS
			VN	-20	-3.68	-0.004465	±2.5	PASS
			VN	-10	-10.07	-0.012218	±2.5	PASS
			VN	0	-3.16	-0.003834	±2.5	PASS
			VN	10	-2.52	-0.003058	±2.5	PASS
			VN	20	-9.30	-0.011284	±2.5	PASS
			VN	30	-9.10	-0.011041	±2.5	PASS
			VN	40	-2.07	-0.002512	±2.5	PASS

			VN	50	-8.78	-0.010653	±2.5	PASS
GSM850	TM2	MCH	VN	-30	-2.26	-0.002701	±2.5	PASS
			VN	-20	-2.45	-0.002929	±2.5	PASS
			VN	-10	-1.55	-0.001853	±2.5	PASS
			VN	0	-8.72	-0.010423	±2.5	PASS
			VN	10	-8.39	-0.010029	±2.5	PASS
			VN	20	-1.55	-0.001853	±2.5	PASS
			VN	30	-8.65	-0.010339	±2.5	PASS
			VN	40	-8.46	-0.010112	±2.5	PASS
			VN	50	-1.61	-0.001924	±2.5	PASS
GSM850	TM2	HCH	VN	-30	-1.36	-0.001602	±2.5	PASS
			VN	-20	-8.85	-0.010426	±2.5	PASS
			VN	-10	-1.68	-0.001979	±2.5	PASS
			VN	0	-8.46	-0.009967	±2.5	PASS
			VN	10	-8.78	-0.010344	±2.5	PASS
			VN	20	-1.55	-0.001826	±2.5	PASS
			VN	30	-8.59	-0.010120	±2.5	PASS
			VN	40	-8.78	-0.010344	±2.5	PASS
			VN	50	-1.87	-0.002203	±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	0.71	0.000384	±2.5	PASS
			VN	-20	-10.40	-0.005621	±2.5	PASS
			VN	-10	-5.75	-0.003108	±2.5	PASS
			VN	0	-0.26	-0.000141	±2.5	PASS
			VN	10	3.94	0.002129	±2.5	PASS
			VN	20	-7.75	-0.004189	±2.5	PASS
			VN	30	-2.00	-0.001081	±2.5	PASS
			VN	40	2.32	0.001254	±2.5	PASS
			VN	50	-7.81	-0.004221	±2.5	PASS
GSM1900	TM2	MCH	VN	-30	-0.97	-0.000516	±2.5	PASS
			VN	-20	-11.75	-0.006250	±2.5	PASS
			VN	-10	7.23	0.003846	±2.5	PASS
			VN	0	-7.94	-0.004223	±2.5	PASS
			VN	10	11.30	0.006011	±2.5	PASS
			VN	20	-4.26	-0.002266	±2.5	PASS

			VN	30	-1.94	-0.001032	±2.5	PASS
			VN	40	1.10	0.000585	±2.5	PASS
			VN	50	3.81	0.002027	±2.5	PASS
GSM1900	TM2	HCH	VN	-30	2.58	0.001351	±2.5	PASS
			VN	-20	7.36	0.003854	±2.5	PASS
			VN	-10	-7.88	-0.004126	±2.5	PASS
			VN	0	-7.17	-0.003754	±2.5	PASS
			VN	10	8.78	0.004597	±2.5	PASS
			VN	20	-6.01	-0.003147	±2.5	PASS
			VN	30	-6.39	-0.003346	±2.5	PASS
			VN	40	-5.94	-0.003110	±2.5	PASS
			VN	50	-6.07	-0.003178	±2.5	PASS

Frequency Error vs. Voltage:

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
WCDMA850	TM1	LCH	TN	VL	9.86	0.011928	±2.5	PASS
			TN	VN	9.17	0.011097	±2.5	PASS
			TN	VH	7.19	0.008697	±2.5	PASS
		MCH	TN	VL	7.39	0.008830	±2.5	PASS
			TN	VN	9.17	0.011074	±2.5	PASS
			TN	VH	2.27	0.002718	±2.5	PASS
		HCH	TN	VL	13.78	0.016275	±2.5	PASS
			TN	VN	9.17	0.016311	±2.5	PASS
			TN	VH	15.84	0.018709	±2.5	PASS
Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
WCDMA850	TM2	LCH	TN	VL	-35.35	-0.042781	±2.5	PASS
			TN	VN	-75.39	-0.091231	±2.5	PASS
			TN	VH	-99.62	-0.120553	±2.5	PASS
		MCH	TN	VL	-24.86	-0.029719	±2.5	PASS
			TN	VN	-75.39	0.027164	±2.5	PASS
			TN	VH	40.37	0.048272	±2.5	PASS
		HCH	TN	VL	-21.26	-0.025107	±2.5	PASS
			TN	VN	-75.39	0.009030	±2.5	PASS
			TN	VH	-28.37	-0.033506	±2.5	PASS
Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
WCDMA8	TM3	LCH	TN	VL	-30.03	-0.036337	±2.5	PASS

50			TN	VN	-123.47	-0.149412	±2.5	PASS
			TN	VH	-8.19	-0.009915	±2.5	PASS
		MCH	TN	VL	-60.00	-0.071733	±2.5	PASS
			TN	VN	-123.47	-0.204855	±2.5	PASS
			TN	VH	-89.68	-0.107217	±2.5	PASS
		HCH	TN	VL	-91.66	-0.108268	±2.5	PASS
			TN	VN	-123.47	0.022980	±2.5	PASS
			TN	VH	6.76	0.007984	±2.5	PASS

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
WCDMA1900	TM1	LCH	TN	VL	39.51	0.021326	±2.5	PASS
			TN	VN	34.65	0.018707	±2.5	PASS
			TN	VH	34.50	0.018625	±2.5	PASS
		MCH	TN	VL	24.40	0.012978	±2.5	PASS
			TN	VN	34.65	0.016103	±2.5	PASS
			TN	VH	33.87	0.018018	±2.5	PASS
		HCH	TN	VL	-394.32	-0.206709	±2.5	PASS
			TN	VN	34.65	-0.098611	±2.5	PASS
			TN	VH	37.81	0.019821	±2.5	PASS
Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
WCDMA1900	TM2	LCH	TN	VL	-51.74	-0.027933	±2.5	PASS
			TN	VN	-39.55	-0.021351	±2.5	PASS
			TN	VH	-52.57	-0.028378	±2.5	PASS
		MCH	TN	VL	-21.03	-0.011184	±2.5	PASS
			TN	VN	-39.55	-0.011241	±2.5	PASS
			TN	VH	-5.42	-0.002881	±2.5	PASS
		HCH	TN	VL	-20.57	-0.010783	±2.5	PASS
			TN	VN	-39.55	-0.011303	±2.5	PASS
			TN	VH	-2.90	-0.001520	±2.5	PASS
Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
WCDMA1900	TM3	LCH	TN	VL	15.85	0.008559	±2.5	PASS
			TN	VN	51.15	0.027611	±2.5	PASS
			TN	VH	-24.92	-0.013452	±2.5	PASS
		MCH	TN	VL	159.35	0.084759	±2.5	PASS
			TN	VN	51.15	0.046864	±2.5	PASS
			TN	VH	-120.80	-0.064257	±2.5	PASS
		HCH	TN	VL	-24.31	-0.012742	±2.5	PASS
			TN	VN	51.15	0.045602	±2.5	PASS
			TN	VH	57.68	0.030236	±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
WCDMA850	TM1	LCH	VN	-30	6.33	0.007663	±2.5	PASS
			VN	-20	8.13	0.009841	±2.5	PASS
			VN	-10	13.57	0.016415	±2.5	PASS
			VN	0	7.37	0.008918	±2.5	PASS
			VN	10	6.96	0.008420	±2.5	PASS
			VN	20	7.90	0.009564	±2.5	PASS
			VN	30	9.93	0.012020	±2.5	PASS
			VN	40	5.92	0.007164	±2.5	PASS
			VN	50	6.36	0.007700	±2.5	PASS
WCDMA850	TM1	MCH	VN	-30	8.30	0.009924	±2.5	PASS
			VN	-20	11.67	0.013956	±2.5	PASS
			VN	-10	3.66	0.004378	±2.5	PASS
			VN	0	4.84	0.005783	±2.5	PASS
			VN	10	8.88	0.010618	±2.5	PASS
			VN	20	7.86	0.009395	±2.5	PASS
			VN	30	7.48	0.008939	±2.5	PASS
			VN	40	5.04	0.006020	±2.5	PASS
			VN	50	6.76	0.008082	±2.5	PASS
WCDMA850	TM1	HCH	VN	-30	11.29	0.013337	±2.5	PASS
			VN	-20	13.73	0.016221	±2.5	PASS
			VN	-10	11.63	0.013734	±2.5	PASS
			VN	0	6.06	0.007155	±2.5	PASS
			VN	10	14.16	0.016726	±2.5	PASS
			VN	20	12.92	0.015266	±2.5	PASS
			VN	30	12.44	0.014689	±2.5	PASS
			VN	40	11.14	0.013157	±2.5	PASS
			VN	50	7.32	0.008651	±2.5	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
WCDMA850	TM1	LCH	VN	-30	6.33	0.007663	±2.5	PASS
			VN	-20	8.13	0.009841	±2.5	PASS
			VN	-10	13.57	0.016415	±2.5	PASS

			VN	0	7.37	0.008918	±2.5	PASS
			VN	10	6.96	0.008420	±2.5	PASS
			VN	20	7.90	0.009564	±2.5	PASS
			VN	30	9.93	0.012020	±2.5	PASS
			VN	40	5.92	0.007164	±2.5	PASS
			VN	50	6.36	0.007700	±2.5	PASS
WCDMA850	TM1	MCH	VN	-30	8.30	0.009924	±2.5	PASS
			VN	-20	11.67	0.013956	±2.5	PASS
			VN	-10	3.66	0.004378	±2.5	PASS
			VN	0	4.84	0.005783	±2.5	PASS
			VN	10	8.88	0.010618	±2.5	PASS
			VN	20	7.86	0.009395	±2.5	PASS
			VN	30	7.48	0.008939	±2.5	PASS
			VN	40	5.04	0.006020	±2.5	PASS
			VN	50	6.76	0.008082	±2.5	PASS
WCDMA850	TM1	HCH	VN	-30	11.29	0.013337	±2.5	PASS
			VN	-20	13.73	0.016221	±2.5	PASS
			VN	-10	11.63	0.013734	±2.5	PASS
			VN	0	6.06	0.007155	±2.5	PASS
			VN	10	14.16	0.016726	±2.5	PASS
			VN	20	12.92	0.015266	±2.5	PASS
			VN	30	12.44	0.014689	±2.5	PASS
			VN	40	11.14	0.013157	±2.5	PASS
			VN	50	7.32	0.008651	±2.5	PASS
Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
WCDMA850	TM2	LCH	VN	-30	3.08	0.003730	±2.5	PASS
			VN	-20	-12.54	-0.015178	±2.5	PASS
			VN	-10	-24.93	-0.030170	±2.5	PASS
			VN	0	12.62	0.015270	±2.5	PASS
			VN	10	-62.76	-0.075943	±2.5	PASS
			VN	20	-36.51	-0.044185	±2.5	PASS
			VN	30	-71.64	-0.086689	±2.5	PASS
			VN	40	109.99	0.133090	±2.5	PASS
			VN	50	64.03	0.077476	±2.5	PASS
WCDMA850	TM2	MCH	VN	-30	-55.57	-0.066443	±2.5	PASS
			VN	-20	-48.29	-0.057740	±2.5	PASS
			VN	-10	-12.85	-0.015361	±2.5	PASS

			VN	0	78.28	0.093589	±2.5	PASS
			VN	10	79.79	0.095395	±2.5	PASS
			VN	20	28.66	0.034261	±2.5	PASS
			VN	30	101.90	0.121830	±2.5	PASS
			VN	40	91.32	0.109187	±2.5	PASS
			VN	50	-42.53	-0.050844	±2.5	PASS
WCDMA850	TM2	HCH	VN	-30	-42.19	-0.049835	±2.5	PASS
			VN	-20	34.45	0.040697	±2.5	PASS
			VN	-10	-2.01	-0.002379	±2.5	PASS
			VN	0	16.46	0.019447	±2.5	PASS
			VN	10	26.46	0.031253	±2.5	PASS
			VN	20	-47.26	-0.055819	±2.5	PASS
			VN	30	-5.55	-0.006561	±2.5	PASS
			VN	40	52.92	0.062506	±2.5	PASS
			VN	50	-111.85	-0.132113	±2.5	PASS
Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
WCDMA850	TM3	LCH	VN	-30	50.69	0.061323	±2.5	PASS
			VN	-20	-87.52	-0.105880	±2.5	PASS
			VN	-10	33.86	0.040963	±2.5	PASS
			VN	0	-49.24	-0.059569	±2.5	PASS
			VN	10	45.36	0.054875	±2.5	PASS
			VN	20	52.15	0.063090	±2.5	PASS
			VN	30	111.45	0.134829	±2.5	PASS
			VN	40	-39.20	-0.047423	±2.5	PASS
			VN	50	-26.35	-0.031878	±2.5	PASS
WCDMA850	TM3	MCH	VN	-30	-41.43	-0.049531	±2.5	PASS
			VN	-20	84.30	0.100795	±2.5	PASS
			VN	-10	19.35	0.023133	±2.5	PASS
			VN	0	65.51	0.078319	±2.5	PASS
			VN	10	-28.02	-0.033495	±2.5	PASS
			VN	20	13.31	0.015908	±2.5	PASS
			VN	30	16.94	0.020250	±2.5	PASS
			VN	40	-31.31	-0.037435	±2.5	PASS
			VN	50	3.75	0.004488	±2.5	PASS
WCDMA850	TM3	HCH	VN	-30	68.56	0.080980	±2.5	PASS
			VN	-20	-28.29	-0.033416	±2.5	PASS
			VN	-10	35.02	0.041364	±2.5	PASS

			VN	0	-14.92	-0.017627	±2.5	PASS
			VN	10	77.96	0.092083	±2.5	PASS
			VN	20	55.65	0.065732	±2.5	PASS
			VN	30	30.94	0.036552	±2.5	PASS
			VN	40	-52.92	-0.062506	±2.5	PASS
			VN	50	8.74	0.010328	±2.5	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
WCDMA1900	TM1	LCH	VN	-30	35.71	0.019275	±2.5	PASS
			VN	-20	29.85	0.016112	±2.5	PASS
			VN	-10	39.05	0.021079	±2.5	PASS
			VN	0	36.21	0.019547	±2.5	PASS
			VN	10	28.32	0.015288	±2.5	PASS
			VN	20	31.40	0.016952	±2.5	PASS
			VN	30	38.04	0.020536	±2.5	PASS
			VN	40	35.29	0.019053	±2.5	PASS
			VN	50	38.35	0.020700	±2.5	PASS
WCDMA1900	TM1	MCH	VN	-30	36.35	0.019333	±2.5	PASS
			VN	-20	35.89	0.019090	±2.5	PASS
			VN	-10	31.02	0.016501	±2.5	PASS
			VN	0	33.37	0.017751	±2.5	PASS
			VN	10	34.19	0.018189	±2.5	PASS
			VN	20	33.94	0.018051	±2.5	PASS
			VN	30	43.85	0.023326	±2.5	PASS
			VN	40	30.30	0.016119	±2.5	PASS
			VN	50	34.47	0.018335	±2.5	PASS
WCDMA1900	TM1	HCH	VN	-30	-617.25	-0.323573	±2.5	PASS
			VN	-20	-847.05	-0.444037	±2.5	PASS
			VN	-10	-173.19	-0.090788	±2.5	PASS
			VN	0	-406.28	-0.212980	±2.5	PASS
			VN	10	-842.33	-0.441566	±2.5	PASS
			VN	20	-644.68	-0.337955	±2.5	PASS
			VN	30	-620.16	-0.325101	±2.5	PASS
			VN	40	-623.17	-0.326677	±2.5	PASS
			VN	50	-180.16	-0.094444	±2.5	PASS
Test Band	Test Mode	Test Channel	Test Volt.	Test Temp	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict

				.				
WCDMA1900	TM2	LCH	VN	-30	-40.92	-0.022092	±2.5	PASS
			VN	-20	21.06	0.011367	±2.5	PASS
			VN	-10	18.75	0.010124	±2.5	PASS
			VN	0	68.44	0.036944	±2.5	PASS
			VN	10	-3.66	-0.001977	±2.5	PASS
			VN	20	70.57	0.038098	±2.5	PASS
			VN	30	-72.28	-0.039020	±2.5	PASS
			VN	40	9.05	0.004885	±2.5	PASS
			VN	50	-9.98	-0.005387	±2.5	PASS
WCDMA1900	TM2	MCH	VN	-30	-115.54	-0.061457	±2.5	PASS
			VN	-20	-1.59	-0.000844	±2.5	PASS
			VN	-10	-16.57	-0.008814	±2.5	PASS
			VN	0	19.33	0.010283	±2.5	PASS
			VN	10	67.25	0.035769	±2.5	PASS
			VN	20	17.44	0.009277	±2.5	PASS
			VN	30	35.16	0.018700	±2.5	PASS
			VN	40	113.97	0.060621	±2.5	PASS
			VN	50	-143.88	-0.076529	±2.5	PASS
WCDMA1900	TM2	HCH	VN	-30	-116.04	-0.060832	±2.5	PASS
			VN	-20	26.64	0.013966	±2.5	PASS
			VN	-10	-12.71	-0.006663	±2.5	PASS
			VN	0	-21.91	-0.011486	±2.5	PASS
			VN	10	83.10	0.043562	±2.5	PASS
			VN	20	-45.35	-0.023773	±2.5	PASS
			VN	30	15.67	0.008215	±2.5	PASS
			VN	40	56.17	0.029444	±2.5	PASS
			VN	50	-94.24	-0.049401	±2.5	PASS
Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
WCDMA1900	TM3	LCH	VN	-30	109.27	0.058987	±2.5	PASS
			VN	-20	112.35	0.060651	±2.5	PASS
			VN	-10	20.52	0.011079	±2.5	PASS
			VN	0	47.33	0.025552	±2.5	PASS
			VN	10	68.95	0.037224	±2.5	PASS
			VN	20	22.09	0.011928	±2.5	PASS
			VN	30	-34.96	-0.018872	±2.5	PASS
			VN	40	30.12	0.016260	±2.5	PASS

			VN	50	-18.08	-0.009761	±2.5	PASS
WCDMA1900	TM3	MCH	VN	-30	17.00	0.009042	±2.5	PASS
			VN	-20	-9.98	-0.005308	±2.5	PASS
			VN	-10	82.79	0.044039	±2.5	PASS
			VN	0	-39.73	-0.021135	±2.5	PASS
			VN	10	-2.58	-0.001372	±2.5	PASS
			VN	20	-10.16	-0.005406	±2.5	PASS
			VN	30	54.75	0.029122	±2.5	PASS
			VN	40	-43.49	-0.023132	±2.5	PASS
			VN	50	-3.39	-0.001802	±2.5	PASS
WCDMA1900	TM3	HCH	VN	-30	27.18	0.014246	±2.5	PASS
			VN	-20	10.50	0.005503	±2.5	PASS
			VN	-10	3.20	0.001680	±2.5	PASS
			VN	0	-51.27	-0.026876	±2.5	PASS
			VN	10	39.64	0.020781	±2.5	PASS
			VN	20	0.09	0.000048	±2.5	PASS
			VN	30	12.82	0.006719	±2.5	PASS
			VN	40	100.59	0.052729	±2.5	PASS
			VN	50	-19.90	-0.010431	±2.5	PASS

Appendix G): Effective Radiated Power of Transmitter (ERP/EIRP)

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
30MHz-1GHz	peak	120kHz	300kHz	Peak
Above 1GHz	Peak	1MHz	3MHz	Peak

Measurement Procedure:

Test procedure as below:

1) The EUT was powered ON and placed on a 1.5m hight table at a 3 meter fully Anechoic Chamber. The antenna of the transmitter was extended to its maximum length. modulation mode and the measuring receiver shall be tuned to the frequency of the transmitter under test.
2) The EUT was set 3 meters(above 18GHz the distance is 1 meter) away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3) The disturbance of the transmitter was maximized on the test receiver display by raising and lowering from 1m to 4m the receive antenna and by rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made.
4) Steps 1) to 3) were performed with the EUT and the receive antenna in both vertical and horizontal polarization.
5) The transmitter was then removed and replaced with another antenna. The center of the antenna was approximately at the same location as the center of the transmitter.
6) A signal at the disturbance was fed to the substitution antenna by means of a non-radiating cable. With both the substitution and the receive antennas horizontally polarized, the receive antenna was raised and lowered to obtain a maximum reading at the test receiver. The level of the signal generator was adjusted until the measured field strength level in step 3) is obtained for this set of conditions.
7) The output power into the substitution antenna was then measured.
8) Steps 6) and 7)were repeated with both antennas polarized.
9) Calculate power in dBm by the following formula:

   ERP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBd)
   EIRP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBi)
   EIRP=ERP+2.15dB

   where:

Pg is the generator output power into the substitution antenna.

10) Test the EUT in the lowest channel, the middle channel the Highest channel
11) The radiation measurements are performed in X, Y, Z axis positioning for EUT operation mode,And found the X axis positioning which it is worse case.
12) Repeat above procedures until all frequencies measured was complete.

Limit:

Mode	GSM 850/WCDMA/HSDPA /HSUPA Band V	GSM 1900/WCDMA/HSDPA /HSUPA Band II
Frequency	824 – 849MHz	1850 – 1910MHz
Limit	38.45dBm（7W）	33.01dBm（2W）

Measurement Data

GPRS 850							
Channel/fc (MHz)	Height (cm)	Azimuth (deg)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
128/824.2	150	112	22.87	38.45	-15.58	Pass	H
	150	26	23.11	38.45	-15.34	Pass	V
190/836.6	150	23	21.51	38.45	-16.94	Pass	H
	150	227	23.47	38.45	-14.98	Pass	V
251/848.8	150	175	22.91	38.45	-15.54	Pass	H
	150	122	23.49	38.45	-14.96	Pass	V

WCDMA band V							
Channel/fc (MHz)	Height (cm)	Azimuth (deg)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
4132/ 826.4	150	98	15.64	38.45	-22.81	Pass	H
	150	125	16.39	38.45	-22.06	Pass	V
4182/ 836.6	150	155	13.67	38.45	-24.78	Pass	H
	150	19	15.24	38.45	-23.21	Pass	V
4233/ 846.6	150	154	14.85	38.45	-23.60	Pass	H
	150	211	16.92	38.45	-21.53	Pass	V

HSDPA band V							
Channel/fc (MHz)	Height (cm)	Azimuth (deg)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
4132/ 826.4	150	135	14.72	38.45	-23.73	Pass	H
	150	58	15.83	38.45	-22.62	Pass	V
4182/ 836.6	150	158	13.33	38.45	-25.12	Pass	H
	150	145	15.17	38.45	-23.28	Pass	V
4233/ 846.6	150	45	15.26	38.45	-23.19	Pass	H
	150	167	16.37	38.45	-22.08	Pass	V

HSUPA band V							
Channel/fc (MHz)	Height (cm)	Azimuth (deg)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
4132/ 826.4	150	84	14.46	38.45	-23.99	Pass	H
	150	197	15.55	38.45	-22.90	Pass	V
4182/ 836.6	150	15	14.16	38.45	-24.29	Pass	H
	150	113	15.89	38.45	-22.56	Pass	V
4233/ 846.6	150	215	14.88	38.45	-23.57	Pass	H
	150	154	16.18	38.45	-22.27	Pass	V

GPRS 1900							
Channel/fc (MHz)	Height (cm)	Azimuth (deg)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
512/1850.2	150	121	20.89	33.01	-12.12	Pass	H
	150	130	22.36	33.01	-10.65	Pass	V
661/1880.0	150	50	20.99	33.01	-12.02	Pass	H
	150	63	23.22	33.01	-9.79	Pass	V
810/1909.8	150	172	20.01	33.01	-13.00	Pass	H
	150	279	21.48	33.01	-11.53	Pass	V

WCDMA band II							
Channel/fc (MHz)	Height (cm)	Azimuth (deg)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
9262/1852.4	150	53	11.69	33.01	-21.32	Pass	H
	150	133	12.78	33.01	-20.23	Pass	V
9400/1880.0	150	125	9.47	33.01	-23.54	Pass	H
	150	126	11.52	33.01	-21.49	Pass	V
9538/1907.6	150	52	10.65	33.01	-22.36	Pass	H
	150	173	12.84	33.01	-20.17	Pass	V

HSDPA band II							
Channel/fc (MHz)	Height (cm)	Azimuth (deg)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
9262/1852.4	150	85	10.23	33.01	-22.78	Pass	H
	150	58	11.34	33.01	-21.67	Pass	V
9400/1880.0	150	235	8.84	33.01	-24.17	Pass	H
	150	127	10.68	33.01	-22.33	Pass	V
9538/1907.6	150	114	10.77	33.01	-22.24	Pass	H
	150	112	11.88	33.01	-21.13	Pass	V

HSUPA band II							
Channel/fc (MHz)	Height (cm)	Azimuth (deg)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
9262/1852.4	150	142	9.97	33.01	-23.04	Pass	H
	150	55	11.03	33.01	-21.98	Pass	V
9400/1880.0	150	114	9.67	33.01	-23.34	Pass	H
	150	341	11.14	33.01	-21.87	Pass	V
9538/1907.6	150	233	10.31	33.01	-22.70	Pass	H
	150	54	11.69	33.01	-21.32	Pass	V

Appendix H): Field strength of spurious radiation

Receiver Setup:

Frequency	Detector	RBW	VBW	Remark
0.009MHz-30MHz	Peak	10kHz	30kHz	Peak
30MHz-1GHz	Peak	120kHz	300kHz	Peak
Above 1GHz	Peak	1MHz	3MHz	Peak

Measurement Procedure:

1. Scan up to 10th harmonic, find the maximum radiation frequency to measure.
2. The technique used to find the Spurious Emissions of the transmitter was the antenna substitution method. Substitution method was performed to determine the actual ERP/EIRP emission levels of the EUT.

Test procedure as below:

1) The EUT was powered ON and placed on a 1.5m hight table at a 3 meter fully Anechoic Chamber. The antenna of the transmitter was extended to its maximum length. modulation mode and the measuring receiver shall be tuned to the frequency of the transmitter under test.
2) The EUT was set 3 meters(above 18GHz the distance is 1 meter) away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3) The disturbance of the transmitter was maximized on the test receiver display by raising and lowering from 1m to 4m the receive antenna and by rotating through 360° the turntable. After the fundamental emission was maximized, a field strength measurement was made.
4) Steps 1) to 3) were performed with the EUT and the receive antenna in both vertical and horizontal polarization.
5) The transmitter was then removed and replaced with another antenna. The center of the antenna was approximately at the same location as the center of the transmitter.
6) A signal at the disturbance was fed to the substitution antenna by means of a non-radiating cable. With both the substitution and the receive antennas horizontally polarized, the receive antenna was raised and lowered to obtain a maximum reading at the test receiver. The level of the signal generator was adjusted until the measured field strength level in step 3) is obtained for this set of conditions.
7) The output power into the substitution antenna was then measured.
8) Steps 6) and 7)were repeated with both antennas polarized.
9) Calculate power in dBm by the following formula:

   ERP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBd)
   EIRP(dBm) = Pg(dBm) – cable loss (dB) + antenna gain (dBi)
   EIRP=ERP+2.15dB

   where:
   Pg is the generator output power into the substitution antenna.
10) Test the EUT in the lowest channel, the middle channel the Highest channel
11) The radiation measurements are performed in X, Y, Z axis positioning for EUT operation mode,And found the X axis positioning which it is worse case.
12) Repeat above procedures until all frequencies measured was complete.

Limit: Attenuated at least 43+10log(P)

Test Data:

GPRS 850 128channel/824.2MHz(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1668.044	149	356	-55.58	-13.00	-42.58	Pass	H
2108.213	150	147	-58.11	-13.00	-45.11	Pass	H
3176.155	151	97	-59.56	-13.00	-46.56	Pass	H
4117.785	150	100	-56.22	-13.00	-43.22	Pass	H
6445.156	151	110	-53.11	-13.00	-40.11	Pass	H
7009.956	149	57	-54.51	-13.00	-41.51	Pass	H
1663.803	150	248	-57.82	-13.00	-44.82	Pass	V
2370.107	150	220	-57.77	-13.00	-44.77	Pass	V
3168.080	149	10	-58.62	-13.00	-45.62	Pass	V
4785.075	151	100	-58.20	-13.00	-45.20	Pass	V
5956.109	150	38	-53.74	-13.00	-40.74	Pass	V
7009.956	150	360	-53.62	-13.00	-40.62	Pass	V

GPRS 850 190channel/836.6MHz(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1668.044	151	352	-55.68	-13.00	-42.68	Pass	H
2179.145	150	167	-57.73	-13.00	-44.73	Pass	H
2691.804	149	91	-59.11	-13.00	-46.11	Pass	H
4181.159	150	211	-56.84	-13.00	-43.84	Pass	H
5895.771	151	100	-52.98	-13.00	-39.98	Pass	H
7451.566	151	360	-54.47	-13.00	-41.47	Pass	H
1329.894	150	79	-60.47	-13.00	-47.47	Pass	V
1828.125	150	70	-57.56	-13.00	-44.56	Pass	V
2698.665	149	254	-59.39	-13.00	-46.39	Pass	V
3757.208	149	100	-57.20	-13.00	-44.20	Pass	V
5895.771	150	10	-53.36	-13.00	-40.36	Pass	V
7413.726	150	78	-54.93	-13.00	-41.93	Pass	V

GPRS 850 251channel/848.8MHz(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1668.044	151	331	-54.92	-13.00	-41.92	Pass	H
2364.082	150	100	-58.61	-13.00	-45.61	Pass	H
3258.042	150	261	-59.96	-13.00	-46.96	Pass	H
4245.509	149	20	-55.71	-13.00	-42.71	Pass	H
6561.030	150	31	-53.08	-13.00	-40.08	Pass	H
7941.185	150	200	-55.58	-13.00	-42.58	Pass	H
1329.894	150	37	-60.86	-13.00	-47.86	Pass	V
1998.475	151	100	-57.45	-13.00	-44.45	Pass	V
2545.202	150	69	-58.84	-13.00	-45.84	Pass	V
4245.509	152	147	-56.52	-13.00	-43.52	Pass	V
5940.967	150	100	-52.81	-13.00	-39.81	Pass	V
8042.903	150	359	-55.05	-13.00	-42.05	Pass	V

GPRS1900 512channel/1850.2MHz(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1367.659	151	360	-61.71	-13.00	-48.71	Pass	H
1573.189	150	121	-59.81	-13.00	-46.81	Pass	H
3274.672	150	110	-59.06	-13.00	-46.06	Pass	H
5747.586	150	11	-54.35	-13.00	-41.35	Pass	H
6315.233	150	169	-53.47	-13.00	-40.47	Pass	H
9909.795	149	64	-54.16	-13.00	-41.16	Pass	H
1195.049	150	278	-61.41	-13.00	-48.41	Pass	V
1472.440	151	200	-60.14	-13.00	-47.14	Pass	V
3208.660	150	220	-59.86	-13.00	-46.86	Pass	V
4278.055	152	360	-58.76	-13.00	-45.76	Pass	V
6577.752	149	359	-53.19	-13.00	-40.19	Pass	V
7413.726	150	341	-54.59	-13.00	-41.59	Pass	V

GPRS1900 661channel/1880MHz(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1502.732	151	39	-60.39	-13.00	-47.39	Pass	H
1668.044	150	360	-56.90	-13.00	-43.90	Pass	H
3233.257	150	70	-58.60	-13.00	-45.60	Pass	H
5297.966	149	61	-55.69	-13.00	-42.69	Pass	H
6315.233	150	359	-53.31	-13.00	-40.31	Pass	H
7394.878	151	241	-55.32	-13.00	-42.32	Pass	H
1399.353	150	289	-61.58	-13.00	-48.58	Pass	V
1518.111	150	10	-59.73	-13.00	-46.73	Pass	V
3738.129	151	100	-59.27	-13.00	-46.27	Pass	V
5164.807	150	110	-57.18	-13.00	-44.18	Pass	V
6001.768	149	79	-53.52	-13.00	-40.52	Pass	V
7643.683	152	64	-55.39	-13.00	-42.39	Pass	V

GPRS1900 810channel/1909.8MHz(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1323.141	151	79	-60.79	-13.00	-47.79	Pass	H
1593.340	149	146	-60.15	-13.00	-47.15	Pass	H
3225.037	150	100	-59.17	-13.00	-46.17	Pass	H
4871.103	150	255	-58.41	-13.00	-45.41	Pass	H
5895.771	151	10	-53.70	-13.00	-40.70	Pass	H
7394.878	150	360	-54.91	-13.00	-41.91	Pass	H
1132.844	150	79	-61.57	-13.00	-48.57	Pass	V
1549.344	150	51	-60.05	-13.00	-47.05	Pass	V
3216.838	152	200	-59.77	-13.00	-46.77	Pass	V
5806.408	150	249	-53.41	-13.00	-40.41	Pass	V
7117.842	149	78	-54.81	-13.00	-41.81	Pass	V
7900.858	150	100	-55.28	-13.00	-42.28	Pass	V

WCDMA band V 4132 channel/826.4MHz(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1159.096	151	38	-60.48	-13.00	-47.48	Pass	H
1663.803	150	161	-56.22	-13.00	-43.22	Pass	H
2532.277	150	79	-58.67	-13.00	-45.67	Pass	H
4410.750	149	271	-58.67	-13.00	-45.67	Pass	H
5865.832	149	345	-53.62	-13.00	-40.62	Pass	H
6561.030	150	161	-53.49	-13.00	-40.49	Pass	H
1364.182	150	332	-61.12	-13.00	-48.12	Pass	V
1601.472	151	100	-59.85	-13.00	-46.85	Pass	V
2437.410	152	147	-58.14	-13.00	-45.14	Pass	V
3766.785	150	10	-58.74	-13.00	-45.74	Pass	V
4736.600	151	360	-57.86	-13.00	-44.86	Pass	V
6713.077	150	14	-52.33	-13.00	-39.33	Pass	V

WCDMA band V 4175 channel/836.4MHz(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1260.670	151	352	-60.28	-13.00	-47.28	Pass	H
1668.044	150	164	-55.46	-13.00	-42.46	Pass	H
3291.385	150	79	-59.46	-13.00	-46.46	Pass	H
5311.469	152	100	-56.18	-13.00	-43.18	Pass	H
6544.350	150	258	-52.97	-13.00	-39.97	Pass	H
7432.622	150	76	-54.98	-13.00	-41.98	Pass	H
1506.563	149	360	-59.81	-13.00	-46.81	Pass	V
2124.374	150	124	-57.12	-13.00	-44.12	Pass	V
3216.838	149	10	-58.39	-13.00	-45.39	Pass	V
4895.965	150	360	-58.38	-13.00	-45.38	Pass	V
5880.782	150	70	-52.17	-13.00	-39.17	Pass	V
6938.942	150	281	-54.29	-13.00	-41.29	Pass	V

WCDMA band V 4232 channel/846.6MHz(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1257.465	151	332	-58.62	-13.00	-45.62	Pass	H
1663.803	150	161	-56.53	-13.00	-43.53	Pass	H
2617.477	151	316	-59.86	-13.00	-46.86	Pass	H
3824.757	150	100	-58.62	-13.00	-45.62	Pass	H
5895.771	150	24	-53.20	-13.00	-40.20	Pass	H
7547.013	150	144	-55.02	-13.00	-42.02	Pass	H
1378.143	149	179	-60.15	-13.00	-47.15	Pass	V
2024.074	150	10	-57.36	-13.00	-44.36	Pass	V
3376.244	152	46	-59.93	-13.00	-46.93	Pass	V
4871.103	151	147	-57.06	-13.00	-44.06	Pass	V
5956.109	150	100	-53.01	-13.00	-40.01	Pass	V
6956.627	150	50	-54.36	-13.00	-41.36	Pass	V

HSDPA band V 4132 channel/826.4MHz(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1257.465	151	159	-59.15	-13.00	-46.15	Pass	H
1668.044	152	170	-54.97	-13.00	-41.97	Pass	H
2162.567	150	160	-57.67	-13.00	-44.67	Pass	H
3757.208	150	100	-59.01	-13.00	-46.01	Pass	H
5791.646	149	360	-54.46	-13.00	-41.46	Pass	H
7394.878	150	79	-54.83	-13.00	-41.83	Pass	H
1378.143	150	247	-60.26	-13.00	-47.26	Pass	V
1746.251	149	220	-51.55	-13.00	-38.55	Pass	V
3342.042	150	200	-59.32	-13.00	-46.32	Pass	V
5689.360	151	21	-55.13	-13.00	-42.13	Pass	V
6428.771	149	156	-53.52	-13.00	-40.52	Pass	V
7451.566	150	100	-55.46	-13.00	-42.46	Pass	V

HSDPA band V 4175channel/836.4MHz(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1257.465	151	39	-59.66	-13.00	-46.66	Pass	H
1668.044	152	161	-56.27	-13.00	-43.27	Pass	H
2590.961	150	78	-58.28	-13.00	-45.28	Pass	H
3747.656	150	351	-57.39	-13.00	-44.39	Pass	H
5925.863	150	349	-53.09	-13.00	-40.09	Pass	H
7009.956	151	217	-53.90	-13.00	-40.90	Pass	H
1668.044	150	100	-58.21	-13.00	-45.21	Pass	V
2443.622	150	145	-55.74	-13.00	-42.74	Pass	V
3168.080	149	360	-58.53	-13.00	-45.53	Pass	V
4858.719	149	54	-58.11	-13.00	-45.11	Pass	V
5910.798	150	100	-53.35	-13.00	-40.35	Pass	V
6494.564	150	246	-53.66	-13.00	-40.66	Pass	V

HSDPA band V 4232channel/846.6MHz(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1668.044	151	326	-56.12	-13.00	-43.12	Pass	H
2340.132	150	100	-58.83	-13.00	-45.83	Pass	H
3903.444	150	172	-58.76	-13.00	-45.76	Pass	H
5204.399	149	98	-56.81	-13.00	-43.81	Pass	H
5925.863	150	47	-52.50	-13.00	-39.50	Pass	H
7376.078	150	100	-55.03	-13.00	-42.03	Pass	H
1442.758	150	284	-60.71	-13.00	-47.71	Pass	V
2060.463	151	100	-57.31	-13.00	-44.31	Pass	V
3805.334	150	61	-58.47	-13.00	-45.47	Pass	V
5660.469	149	360	-55.18	-13.00	-42.18	Pass	V
6527.712	150	79	-52.85	-13.00	-39.85	Pass	V
7470.558	150	56	-54.91	-13.00	-41.91	Pass	V

HSUPA band V 4132 channel/826.4MHz(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1663.803	152	229	-56.29	-13.00	-43.29	Pass	H
2468.631	152	170	-58.80	-13.00	-45.80	Pass	H
4310.849	150	80	-58.38	-13.00	-45.38	Pass	H
5895.771	150	100	-53.02	-13.00	-40.02	Pass	H
7135.984	149	36	-54.66	-13.00	-41.66	Pass	H
7643.683	150	79	-55.66	-13.00	-42.66	Pass	H
1668.044	150	332	-57.57	-13.00	-44.57	Pass	V
2135.217	152	220	-57.48	-13.00	-44.48	Pass	V
2449.851	150	88	-59.05	-13.00	-46.05	Pass	V
3776.385	152	21	-59.02	-13.00	-46.02	Pass	V
6001.768	149	156	-53.05	-13.00	-40.05	Pass	V
9587.228	150	109	-55.45	-13.00	-42.45	Pass	V

HSUPA band V 4175channel/836.4MHz(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1257.465	150	55	-60.54	-13.00	-47.54	Pass	H
1659.574	152	192	-56.06	-13.00	-43.06	Pass	H
2532.277	150	78	-58.06	-13.00	-45.06	Pass	H
3299.775	150	351	-58.83	-13.00	-45.83	Pass	H
5910.798	150	169	-53.26	-13.00	-40.26	Pass	H
7508.688	151	217	-55.14	-13.00	-42.14	Pass	H
1464.963	150	158	-59.92	-13.00	-46.92	Pass	V
2044.788	152	145	-56.98	-13.00	-43.98	Pass	V
3854.077	149	226	-58.79	-13.00	-45.79	Pass	V
5910.798	149	54	-53.40	-13.00	-40.40	Pass	V
7045.735	150	100	-54.27	-13.00	-41.27	Pass	V
7663.165	150	33	-55.61	-13.00	-42.61	Pass	V

HSUPA band V 4232channel/846.6MHz(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1260.670	152	86	-60.53	-13.00	-47.53	Pass	H
1668.044	149	226	-55.27	-13.00	-42.27	Pass	H
2630.837	150	172	-60.29	-13.00	-47.29	Pass	H
4310.849	149	98	-59.07	-13.00	-46.07	Pass	H
6379.864	150	99	-53.55	-13.00	-40.55	Pass	H
7920.996	150	100	-54.68	-13.00	-41.68	Pass	H
1659.574	150	332	-58.18	-13.00	-45.18	Pass	V
2437.410	151	100	-53.11	-13.00	-40.11	Pass	V
3805.334	151	89	-58.25	-13.00	-45.25	Pass	V
5880.782	149	360	-53.37	-13.00	-40.37	Pass	V
7027.823	150	79	-54.07	-13.00	-41.07	Pass	V
8571.377	150	10	-56.42	-13.00	-43.42	Pass	V

WCDMA band II 9262 channel/1852.4MHz(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1257.465	151	351	-60.96	-13.00	-47.96	Pass	H
1663.803	150	200	-56.50	-13.00	-43.50	Pass	H
3662.775	150	217	-58.22	-13.00	-45.22	Pass	H
6001.768	151	96	-53.47	-13.00	-40.47	Pass	H
6833.768	150	100	-53.41	-13.00	-40.41	Pass	H
9909.795	149	351	-54.78	-13.00	-41.78	Pass	H
1257.465	150	70	-58.95	-13.00	-45.95	Pass	V
1668.044	150	151	-56.48	-13.00	-43.48	Pass	V
4676.696	150	100	-58.73	-13.00	-45.73	Pass	V
6331.329	149	21	-52.85	-13.00	-39.85	Pass	V
7117.842	149	10	-54.65	-13.00	-41.65	Pass	V
9909.795	150	360	-53.64	-13.00	-40.64	Pass	V

WCDMA band II 9400 channel/1880MHz(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1260.670	151	91	-60.20	-13.00	-47.20	Pass	H
1663.803	150	100	-55.69	-13.00	-42.69	Pass	H
3690.853	150	360	-59.75	-13.00	-46.75	Pass	H
5747.586	149	351	-54.28	-13.00	-41.28	Pass	H
6594.518	150	359	-53.69	-13.00	-40.69	Pass	H
7394.878	150	240	-55.09	-13.00	-42.09	Pass	H
1257.465	150	100	-60.12	-13.00	-47.12	Pass	V
1668.044	151	248	-58.08	-13.00	-45.08	Pass	V
3274.672	150	358	-59.36	-13.00	-46.36	Pass	V
5732.974	151	70	-53.85	-13.00	-40.85	Pass	V
6816.394	150	154	-53.57	-13.00	-40.57	Pass	V
9636.161	150	100	-54.31	-13.00	-41.31	Pass	V

WCDMA band II 9537 channel/1907.6MHz(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1257.465	151	331	-60.96	-13.00	-47.96	Pass	H
1668.044	150	100	-56.44	-13.00	-43.44	Pass	H
3672.110	150	147	-58.95	-13.00	-45.95	Pass	H
5297.966	149	154	-56.02	-13.00	-43.02	Pass	H
6001.768	150	121	-53.45	-13.00	-40.45	Pass	H
7117.842	150	76	-54.67	-13.00	-41.67	Pass	H
1257.465	149	49	-59.57	-13.00	-46.57	Pass	V
1663.803	150	100	-58.15	-13.00	-45.15	Pass	V
4107.316	151	67	-59.15	-13.00	-46.15	Pass	V
5747.586	150	100	-54.08	-13.00	-41.08	Pass	V
6851.185	151	360	-53.68	-13.00	-40.68	Pass	V
7394.878	150	40	-55.02	-13.00	-42.02	Pass	V

HSDPA band II 9262 channel/1852.4MHz(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1167.982	151	61	-60.36	-13.00	-47.36	Pass	H
1521.981	150	200	-60.60	-13.00	-47.60	Pass	H
4245.509	150	157	-58.64	-13.00	-45.64	Pass	H
5762.235	150	241	-53.29	-13.00	-40.29	Pass	H
6347.466	152	100	-53.06	-13.00	-40.06	Pass	H
7413.726	150	169	-55.28	-13.00	-42.28	Pass	H
1323.141	149	254	-60.29	-13.00	-47.29	Pass	V
1668.044	150	26	-58.08	-13.00	-45.08	Pass	V
3644.175	151	100	-58.92	-13.00	-45.92	Pass	V
5956.109	150	332	-53.48	-13.00	-40.48	Pass	V
6799.064	150	159	-54.14	-13.00	-41.14	Pass	V
9909.795	150	100	-53.81	-13.00	-40.81	Pass	V

HSDPA band II 9400 channel/1880MHz(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1257.465	151	151	-60.57	-13.00	-47.57	Pass	H
1663.803	150	79	-55.47	-13.00	-42.47	Pass	H
3672.110	150	360	-58.84	-13.00	-45.84	Pass	H
5297.966	152	200	-55.12	-13.00	-42.12	Pass	H
6315.233	152	157	-52.87	-13.00	-39.87	Pass	H
7643.683	150	149	-55.80	-13.00	-42.80	Pass	H
1195.049	150	217	-60.81	-13.00	-47.81	Pass	V
1323.141	151	360	-60.73	-13.00	-47.73	Pass	V
3672.110	151	100	-58.61	-13.00	-45.61	Pass	V
5791.646	150	243	-52.76	-13.00	-39.76	Pass	V
6868.647	149	100	-53.36	-13.00	-40.36	Pass	V
7900.858	150	100	-55.45	-13.00	-42.45	Pass	V

HSDPA band II 9537 channel/1907.6MHz(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1079.357	151	37	-60.56	-13.00	-47.56	Pass	H
1577.198	150	60	-59.68	-13.00	-46.68	Pass	H
3662.775	149	360	-58.83	-13.00	-45.83	Pass	H
5762.235	150	79	-53.35	-13.00	-40.35	Pass	H
7376.078	150	151	-54.34	-13.00	-41.34	Pass	H
7941.185	149	247	-54.94	-13.00	-41.94	Pass	H
1079.357	150	291	-60.56	-13.00	-47.56	Pass	V
1577.198	150	200	-59.68	-13.00	-46.68	Pass	V
3662.775	151	147	-58.83	-13.00	-45.83	Pass	V
5762.235	150	10	-53.35	-13.00	-40.35	Pass	V
7376.078	151	36	-54.34	-13.00	-41.34	Pass	V
7941.185	150	111	-54.94	-13.00	-41.94	Pass	V

HSUPA band II 9262 channel/1852.4MHz(lowest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1167.982	152	59	-60.36	-13.00	-47.36	Pass	H
1521.981	150	20	-60.60	-13.00	-47.60	Pass	H
4245.509	150	332	-58.64	-13.00	-45.64	Pass	H
5762.235	151	97	-53.29	-13.00	-40.29	Pass	H
6347.466	149	132	-53.06	-13.00	-40.06	Pass	H
7413.726	149	351	-55.28	-13.00	-42.28	Pass	H
1195.049	150	70	-61.26	-13.00	-48.26	Pass	V
1323.141	150	151	-59.91	-13.00	-46.91	Pass	V
4908.444	150	109	-58.38	-13.00	-45.38	Pass	V
6299.178	150	21	-53.26	-13.00	-40.26	Pass	V
7920.996	149	109	-55.53	-13.00	-42.53	Pass	V
10165.290	150	360	-53.53	-13.00	-40.53	Pass	V

HSUPA band II 9400 channel/1880MHz(middle channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1367.659	151	229	-60.87	-13.00	-47.87	Pass	H
1663.803	152	100	-55.90	-13.00	-42.90	Pass	H
3672.110	150	26	-59.29	-13.00	-46.29	Pass	H
5956.109	149	351	-52.96	-13.00	-39.96	Pass	H
7981.717	150	359	-54.55	-13.00	-41.55	Pass	H
9909.795	150	240	-53.96	-13.00	-40.96	Pass	H
1079.357	150	19	-60.95	-13.00	-47.95	Pass	V
1510.402	151	248	-60.22	-13.00	-47.22	Pass	V
3225.037	151	358	-58.15	-13.00	-45.15	Pass	V
5762.235	151	70	-53.78	-13.00	-40.78	Pass	V
6577.752	150	154	-53.33	-13.00	-40.33	Pass	V
7941.185	150	100	-54.93	-13.00	-41.93	Pass	V

HSUPA band II 9537 channel/1907.6MHz(highest channel)							
Frequency (MHz)	Height (cm)	Azimuth (deg)	Spurious Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	Antenna Polaxis.
1257.465	152	87	-60.42	-13.00	-47.42	Pass	H
1668.044	150	100	-55.49	-13.00	-42.49	Pass	H
3249.760	149	89	-59.44	-13.00	-46.44	Pass	H
6001.768	149	154	-53.30	-13.00	-40.30	Pass	H
7117.842	150	121	-54.47	-13.00	-41.47	Pass	H
7920.996	150	76	-55.64	-13.00	-42.64	Pass	H
1323.141	149	99	-60.75	-13.00	-47.75	Pass	V
1663.803	150	100	-58.09	-13.00	-45.09	Pass	V
3883.622	151	67	-58.97	-13.00	-45.97	Pass	V
5791.646	150	100	-53.31	-13.00	-40.31	Pass	V
7451.566	151	229	-55.46	-13.00	-42.46	Pass	V
9784.466	150	40	-55.56	-13.00	-42.56	Pass	V

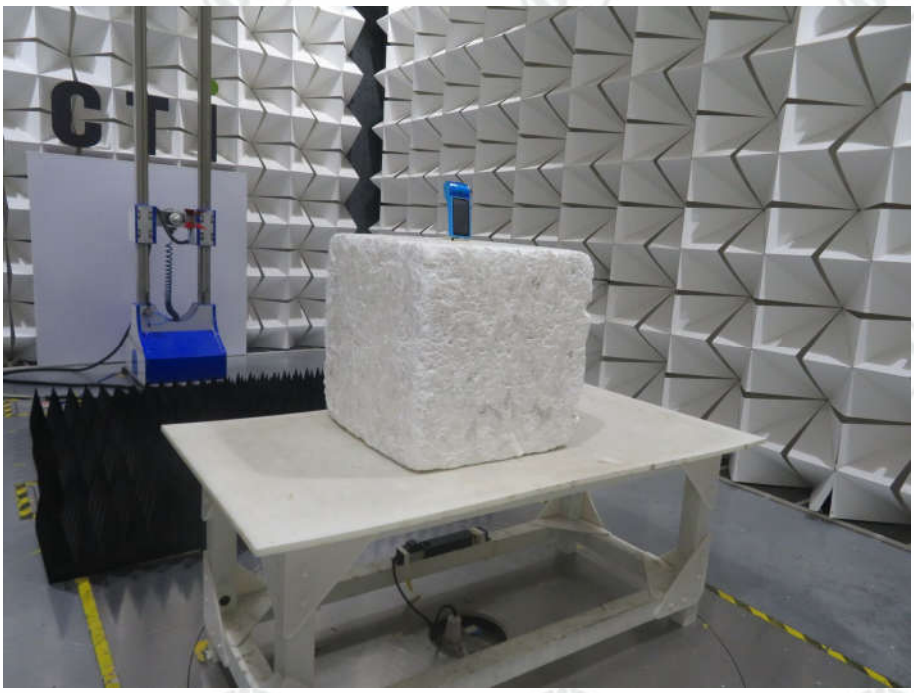
Note:

1) Scan from 9kHz to 25GHz, the disturbance below 1G was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

PHOTOGRAPHS OF TEST SETUP

Test model No.: AP02

Radiated spurious emission Test Setup-1(Below 1G)



Radiated spurious emission Test Setup-2(Above1G)

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No.EED32J00230701 for EUT external and internal photos.

*** End of Report ***

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.