FCC CFR47 PART 22H & 24E
CERTIFICATION
TEST REPORT

FOR

PDA PHONE

MODEL NUMBER: WIZA100, WIZA110, WIZA200

FCC ID: NM8WZ

REPORT NUMBER: 05T3452-1

ISSUE DATE: JUNE 20, 2005

Prepared for
HIGH TECH COMPUTER CORP.
23 HSIN HUA ROAD
TAOYUAN 330, TAIWAN R.O.C.

Prepared by
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Revision History

Rev.	Issue Date	Revisions	Revised By
A	6/20/05	Initial Issue	MH

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: HIGH TECH COMPUTER, CORP.
23, HSIN HUA ROAD
TAOYUAN 330, TAIWAN R.O.C.

EUT DESCRIPTION: PDA PHONE

MODEL: WIZA100, WIZA110, WIZA200

SERIAL NUMBER: HT521EB00034, HT521EB00012, HT520EE00118

DATE TESTED: JUNE 04 - 09, 2005

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 22 H and 24 E	NO NON-COMPLIANCE NOTED
DIGITAL DEVICE CONFIGURATION: FCC PART 15 SUBPART B	NO NON-COMPLIANCE NOTED

Compliance Certification Services, Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

Approved & Released For CCS By:

MIKE HECKROTTE
ENGINEERING MANAGER
COMPLIANCE CERTIFICATION SERVICES

Tested By:

CHIN PANG
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with TIA/EIA 603A (2001), ANSI C63.4-2003, FCC CFR 47 Part 2, FCC CFR 47 Part 15 and FCC CFR 47 Part 22 and Part 24.

3. CROSS REFERENCE TO OTHER REPORT ON THIS PRODUCT

Other FCC report applicable to this product includes CCS 05U3452-2.

4. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 561F Monterey Road, Morgan Hill, California, USA. The sites are constructed in conformance with the requirements of ANSI C63.4, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

5. CALIBRATION AND UNCERTAINTY

5.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

5.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Radiated Emission, 30 to 200 MHz	+/- 3.3 dB
Radiated Emission, 200 to 1000 MHz	+4.5 / -2.9 dB
Radiated Emission, 1000 to 2000 MHz	+4.5 / -2.9 dB
Power Line Conducted Emission	+/- 2.9 dB

Uncertainty figures are valid to a confidence level of 95%.

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6. EQUIPMENT UNDER TEST

6.1. DESCRIPTION OF EUT

The EUT is a PDA Phone with all auxiliary equipment as described below.

Auxiliary Equipment	Brand	Model No.
Li-Ion Rechargeable Battery	HP	HSTNH-D06B
AC adaptor	Delta	ADP-5FH B
Earphone	Cotron Corp.	CHM-201STV01007
Earphone	eAcetech Corp.	TS168-34-03206N-VM-02
Earphone	eAcetech Corp.	TS888-03206N

6.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power, ERP, and EIRP as follows:

824 to 849 MHz Authorized Band

Frequency Range (MHz)	Modulation	Conducted Output Power (dBm)	Conducted Output Power (mW)	ERP Output Power (dBm)	ERP Output Power (mW)
824.2 - 848.8	GSM	33.43	2202.93	30.80	1202.26
824.2 - 848.8	GPRS	33.38	2177.71	30.40	1096.48
824.2 - 848.8	EGPRS	27.82	605.34	24.72	296.48

1850 - 1910 MHz Authorized Band

Frequency Range (MHz)	Modulation	Conducted Output Power (dBm)	Conducted Output Power (mW)	EIRP Output Power (dBm)	EIRP Output Power (mW)
1850.2 - 1909.8	GSM	30.45	1109.17	31.10	1288.25
1850.2 - 1909.8	GPRS	30.67	1166.81	30.80	1202.26
1850.2 - 1909.8	EGPRS	27.90	616.60	28.30	676.08

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6.3. DESCRIPTION OF AVAILABLE ANTENNAS

For GSM850, the radio utilizes a PIFA antenna with a maximum gain of –0.5 dBi, and for GSM1900 PCS band, the radio utilizes a PIFA antenna with a maximum gain of +1.5 dBi

6.4. MANUFACTURER'S DESCRIPTION OF MODEL DIFFERENCES

The PDA Phone under this application has three models: WIZA200, WIZA100 and WIZA110. The WIZA200 and WIZA100 are electrically identical except that there are slight differences in housing, WIZA 110 is identical to WIZA100 except that WIZA110 does not have a CMOS function as WIZA does.

The three models share the same PCB layout /placement /schematics /BOM.

6.5. SOFTWARE AND FIRMWARE

The EUT is linked with CMU200 tester support equipment during testing.

6.6. WORST-CASE CONFIGURATION AND MODE

The worst-case channel is determined as the channel with the highest output power. The highest measured output power was 848.8 MHz @ GSM850 and 1909.8 MHz @ GSM1900.

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6.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
AC Adapter	Delta Electronic	ADO-5FH B	4MW0512038391	DoC

I/O CABLES

I/O CABLE LIST						
Cable No.	**Port**	**# of Identical Ports**	**Connector Type**	**Cable Type**	**Cable Length**	**Remarks**
1	DC	1	DC	Unshielded	2m	No

TEST SETUP

The EUT is installed as a stand-alone device during the tests.

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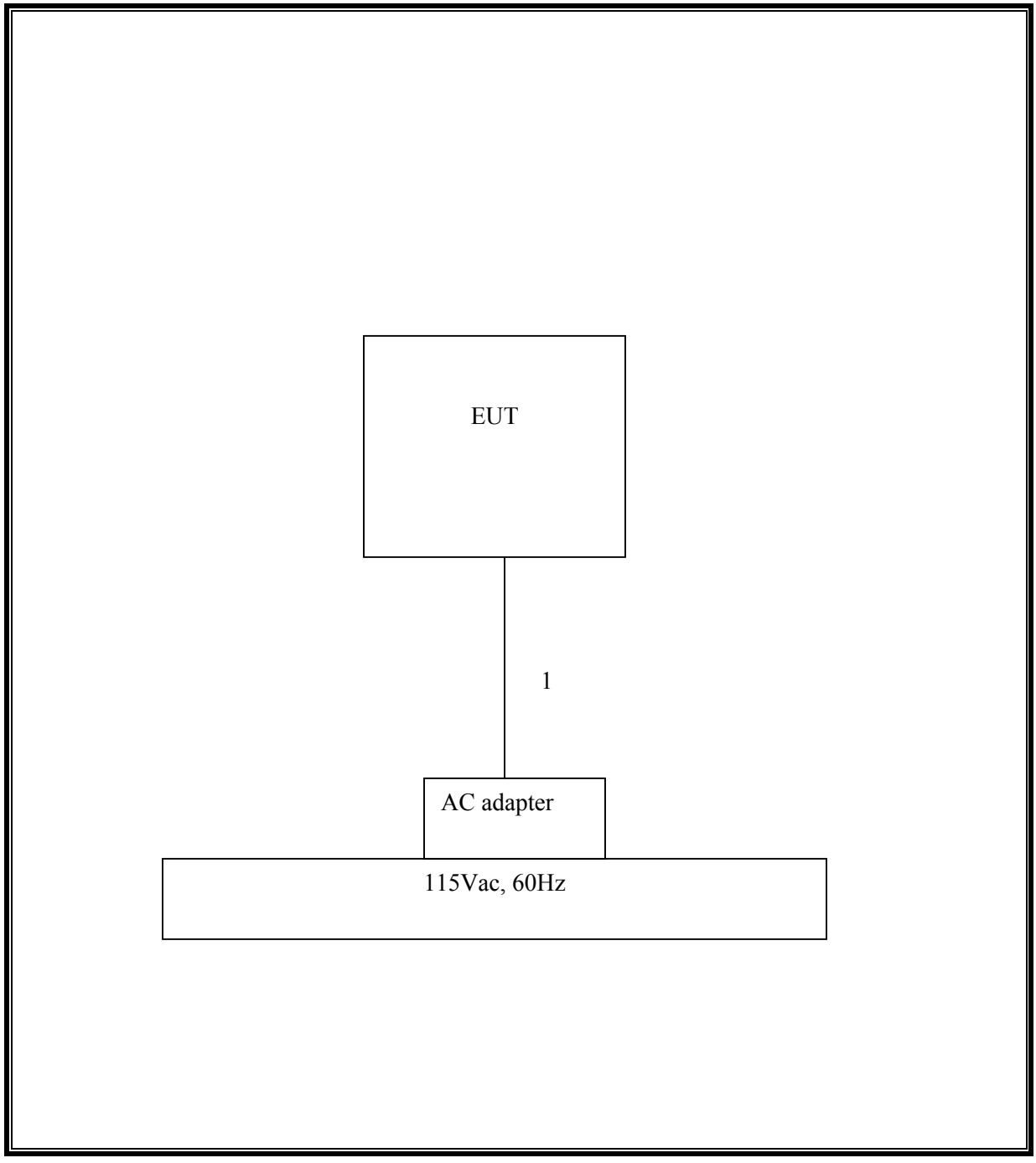
SETUP DIAGRAM FOR TESTS



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SETUP FOR DIGITAL DEVICE TESTS

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Printer	HP	2225C	2930S52614	DSI6XU2225
Modem	Hayes	4714US	A02247143261	BFJUSA-31719-M5-E
Monitor	Samsung	PG17HS	CCS00914	N/A
PC	HP	VectraVE D6533T	US82209954	DoC
Mouse	Microsoft	91289	1917031	C3KKMP3
Keyboard	HP	SK-2502	HR804075765	GYUR41SK

I/O CABLES

I/O CABLE LIST						
Cable No.	**Port**	**# of Identical Ports**	**Connector Type**	**Cable Type**	**Cable Length**	**Remarks**
1	AC	2	US 115V	Un-shielded	2m	Bundle with LC test
2	DC	2	DC plug	Un-shielded	2m	N/A
3	Serial	1	DB9	Shielded	1m	N/A
4	Parallel	1	DB25	Shielded	2m	N/A
5	KB	1	PS/2	Shielded	2m	N/A
6	Mouse	1	PS/2	Un-shielded	2m	N/A
7	Video	1	DB15	Shielded	2m	One Torroid on Each End
8	USB	1	USB	Un-shielded	2m	N/A

TEST SETUP

The EUT is connected to a laptop computer system with minimum configuration during the tests. Test software exercised and linked with the EUT

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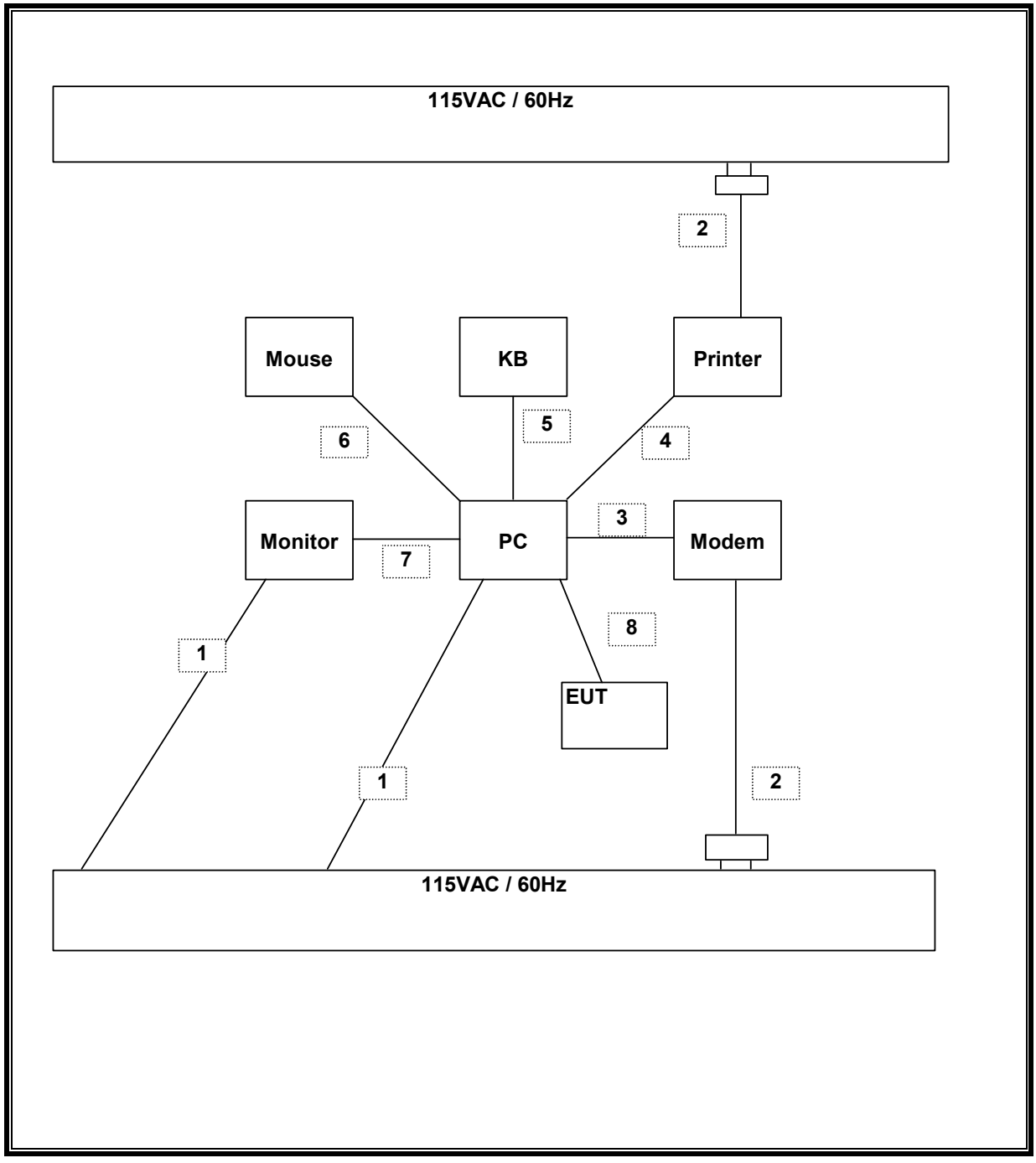
SETUP DIAGRAM FOR DIGITAL DEVICE TESTS



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7. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**Cal Due**
Signal Generator, 10 MHz ~ 20 GHz	HP	83732B	US34490599	7/7/2005
Peak Power Meter	Agilent	E4416A	GB41291160	2/9/06
Oscilloscope, 100MHz 4Ch.	HP	54601A	3106A00123	5/17/06
Peak / Average Power Sensor	Agilent	E9327A	US40440755	2/10/06
Oscilloscope, 100MHz 4Ch.	HP	54601A	3106A00123	5/17/06
Spectrum Analyzer 3 Hz ~ 44 GHz	Agilent	E4446A	MY43360112	3/28/06
Power Sensor,18GHz,300 mW	R&S	NVR-Z51	DE 13014	10/20/05
AC Power Source, 8 kVA	APC	AFP2-8KVA	J5061	CNR
Temperature / Humidity Chamber	Thermotron	SE 600-10-10	29800	5/13/06
Microwave Detector 0.01 ~ 33 GHz	Agilent	8474C	2905A04047	11/10/05
Power Splitter	HP	11667B	NA	CNR
Antenna, Bilog 30MHz ~ 2Ghz	Sunol Sciences	JB1	A121003	3/3/06
RF Filter Section	HP	85420E	3705A00256	3/29/06
EMI Receiver, 9 kHz ~ 2.9 GHz	HP	8542E	3942A00286	3/29/06
EMI Test Receiver	R & S	ESHS 20	827129/006	6/3/06
LISN, 10 kHz ~ 30 MHz	Solar	8012-50-R-24-BNC	8379443	10/21/05
Wireless Communication Test Set	Agilent	8960 Series 10	E5515C	5/5/06
Site A Line Stabilizer/Conditioner	Tripplite	LC-1800a	A005181	CNR
Antenna, Horn 1 ~ 18 GHz	EMCO	3115	9001-3245	4/22/06
Antenna, Horn 1 ~ 18 GHz	EMCO	3115	2238	4/22/06
Tuned Dipole Antenna 400~1000 MHz	ETS	3121C DB4	1629	5/7/06

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8. LIMITS AND RESULTS

8.1. OCCUPIED BANDWIDTH

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the –26 dB bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal –26 dB bandwidth function is utilized.

RESULTS

No non-compliance noted:

GSM850 Modulation

Channel	Frequency (MHz)	-26 dB Bandwidth (kHz)	99% Bandwidth (kHz)
Low	824.2	297.142	240.995
Middle	836.4	300.997	256.175
High	848.8	299.255	239.1711

GPRS850 Modulation

Channel	Frequency (MHz)	-26 dB Bandwidth (kHz)	99% Bandwidth (kHz)
Low	824.2	307.037	250.3279
Middle	836.4	303.225	248.6693
High	848.8	297.803	246.1336

EGPRS850 Modulation

Channel	Frequency (MHz)	-26 dB Bandwidth (kHz)	99% Bandwidth (kHz)
Low	824.2	300.589	244.7369
Middle	836.4	299.316	246.3554
High	848.8	294.271	243.6735

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GSM1900

Channel	Frequency (MHz)	-26 dB Bandwidth (kHz)	99% Bandwidth (kHz)
Low	1850.2	298.795	245.610
Middle	1880	291.999	239.963
High	1909.8	301.635	240.831

GPRS1900

Channel	Frequency (MHz)	-26 dB Bandwidth (kHz)	99% Bandwidth (kHz)
Low	1850.2	302.262	241.252
Middle	1880	301.544	244.230
High	1909.8	303.37	246.447

EGPRS1900

Channel	Frequency (MHz)	-26 dB Bandwidth (kHz)	99% Bandwidth (kHz)
Low	1850.2	301.549	243.374
Middle	1880	306.052	243.791
High	1909.8	298.374	246.990

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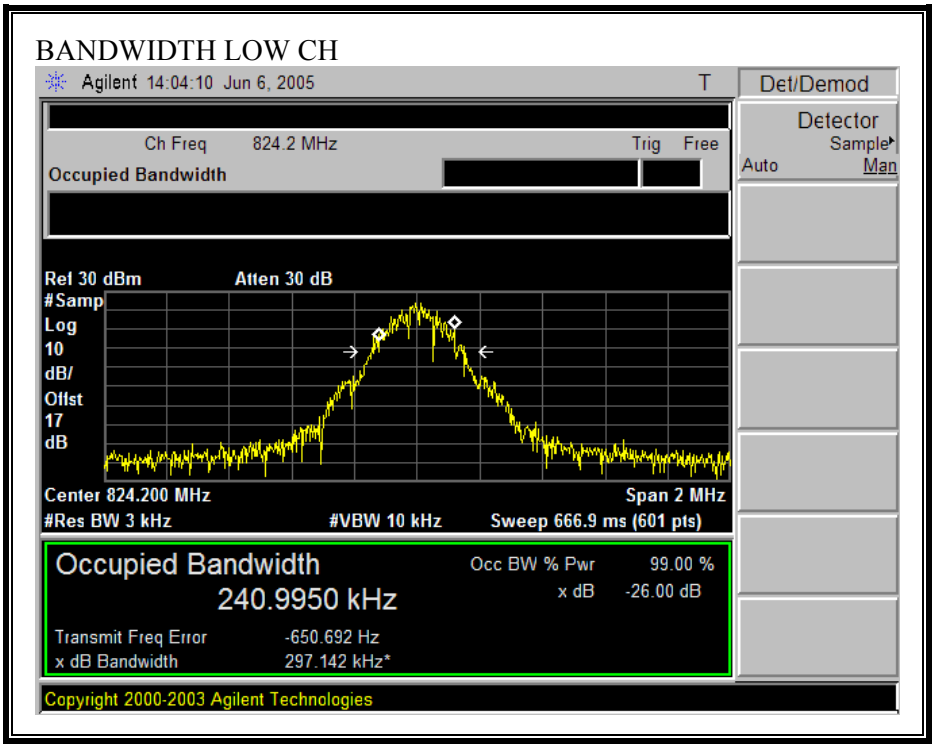
GSM850 OCCUPIED BANDWIDTH

BANDWIDTH LOW CH



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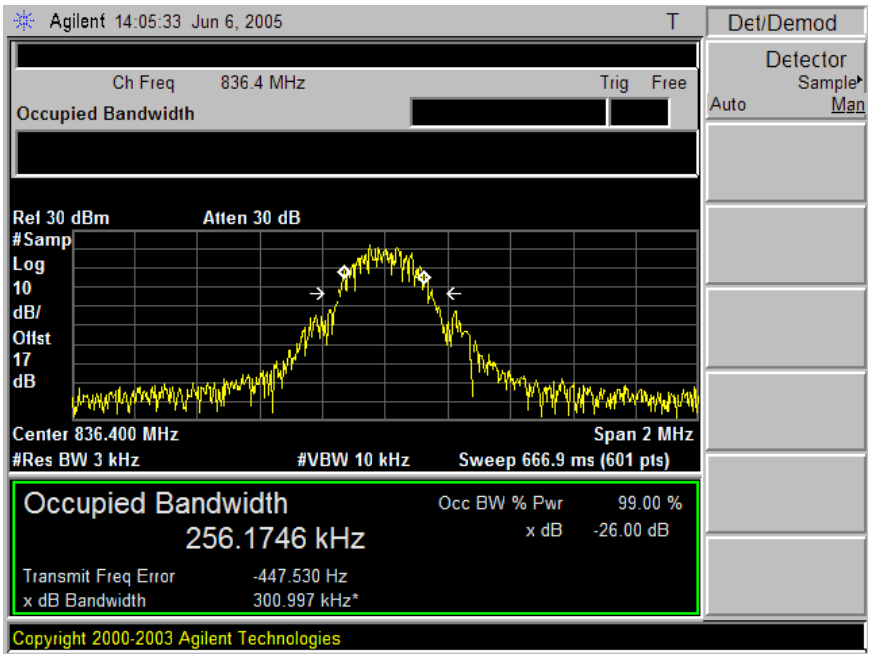
BANDWIDTH MID CH



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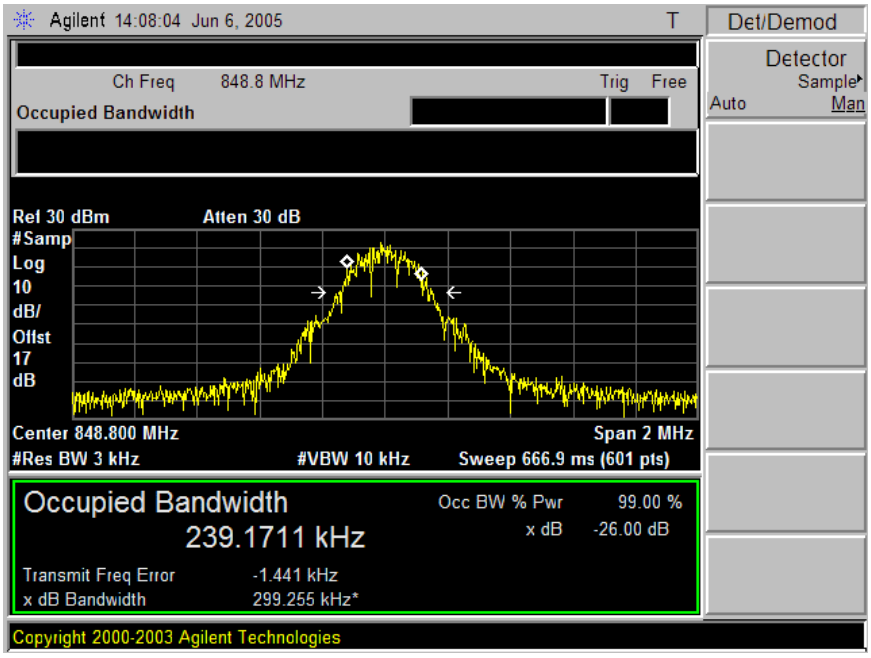
BANDWIDTH HIGH CH



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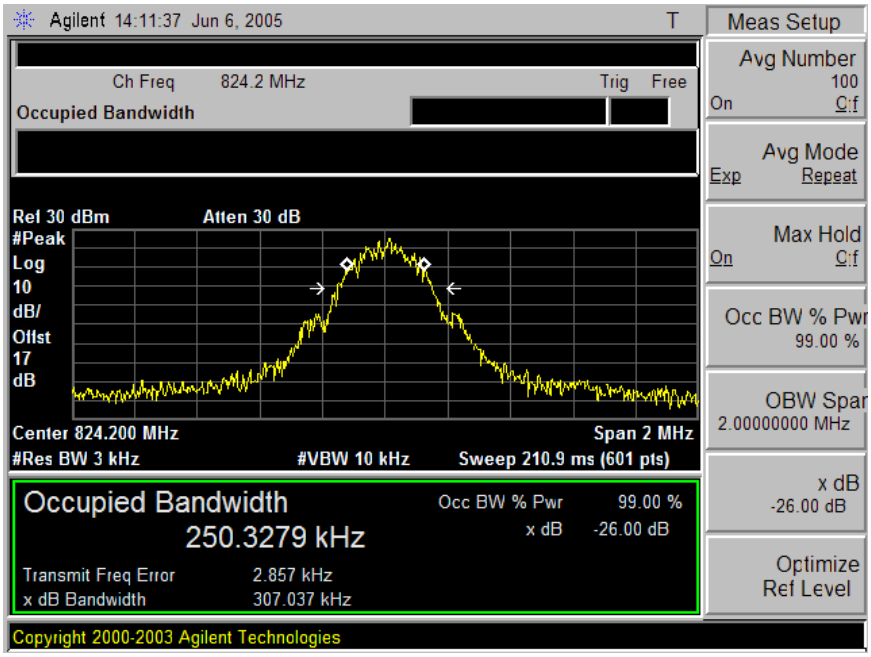
GPRS850 OCCUPIED BANDWIDTH

BANDWIDTH LOW CH



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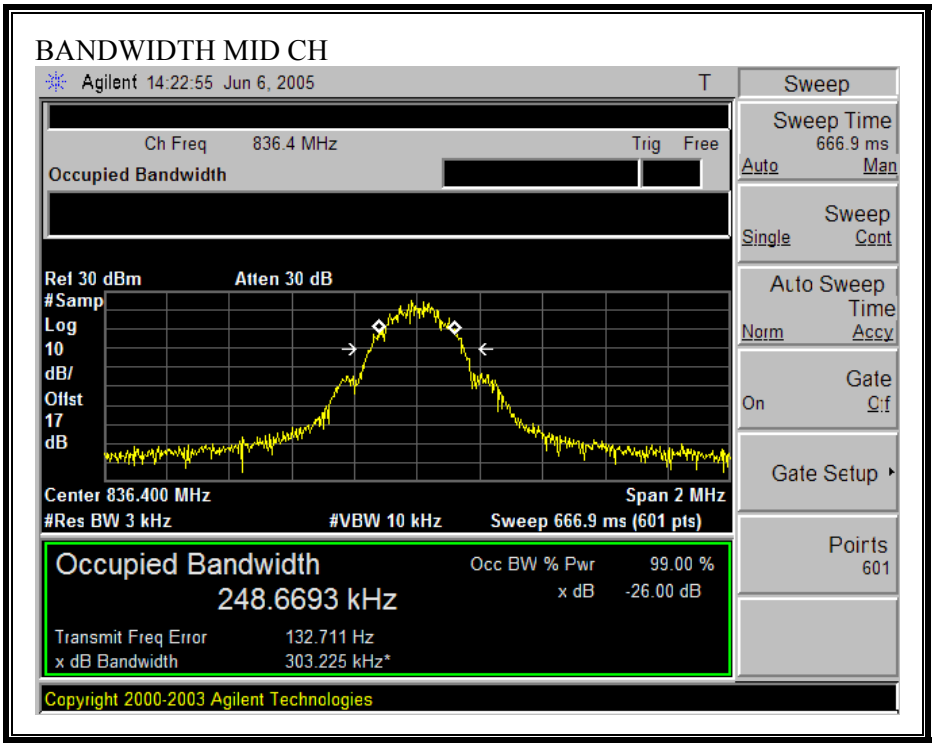
BANDWIDTH MID CH



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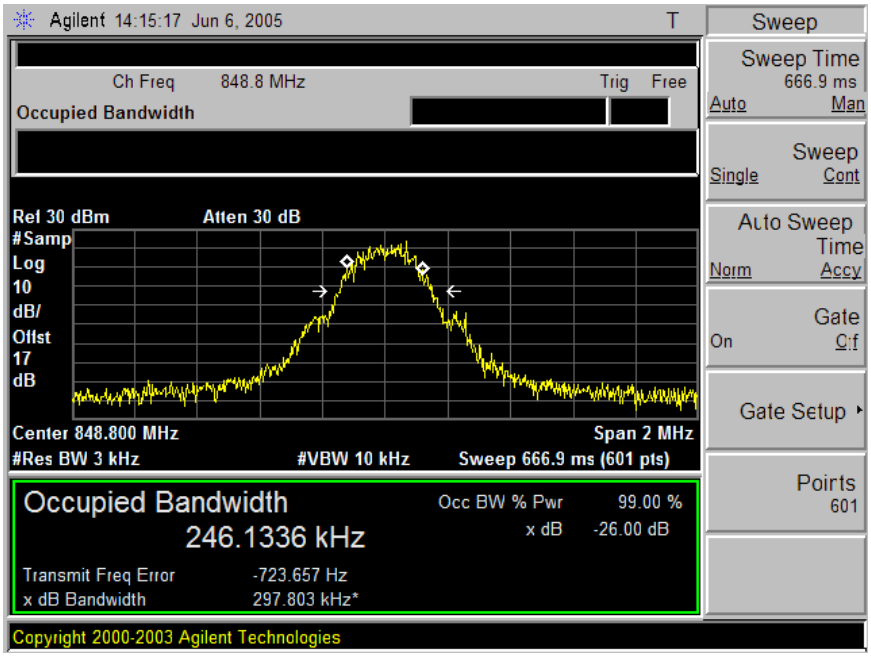

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EGPR850 OCCUPIED BANDWIDTH

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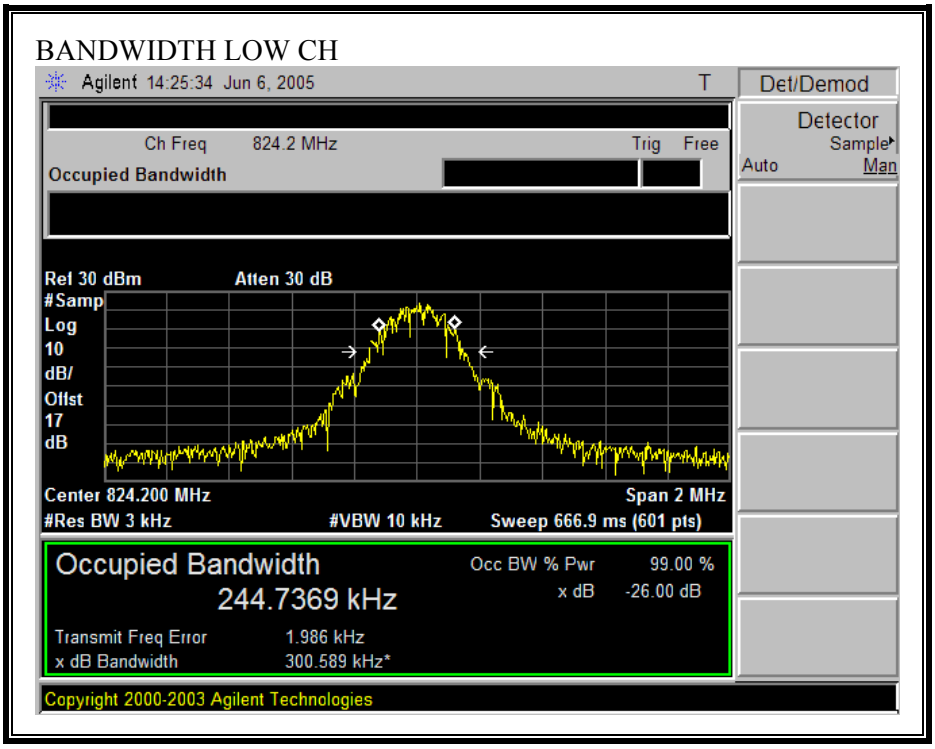

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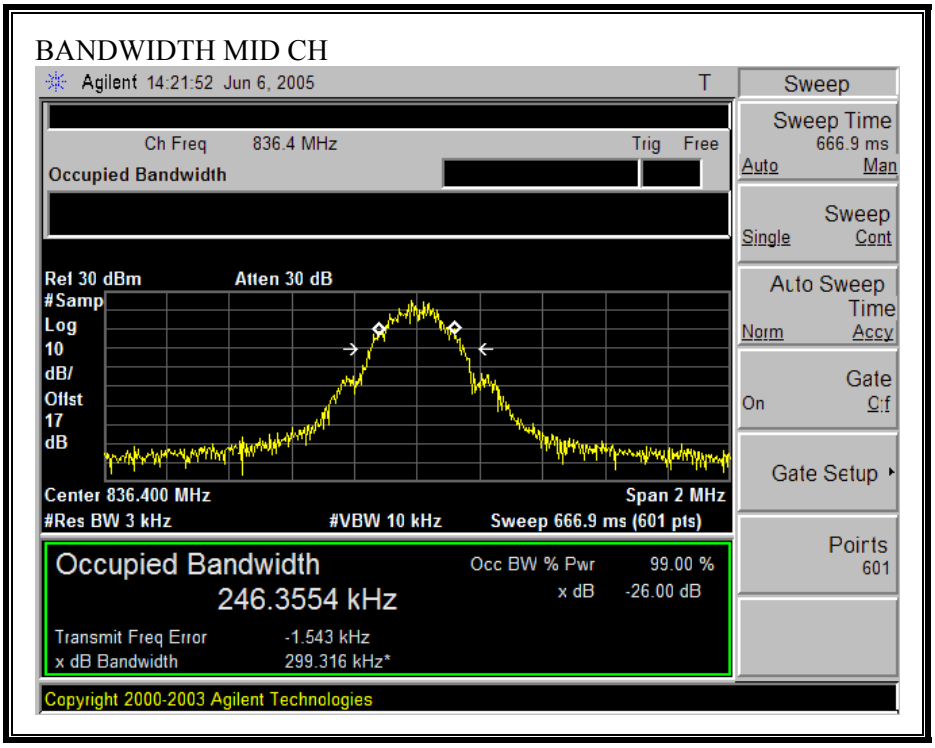
BANDWIDTH MID CH



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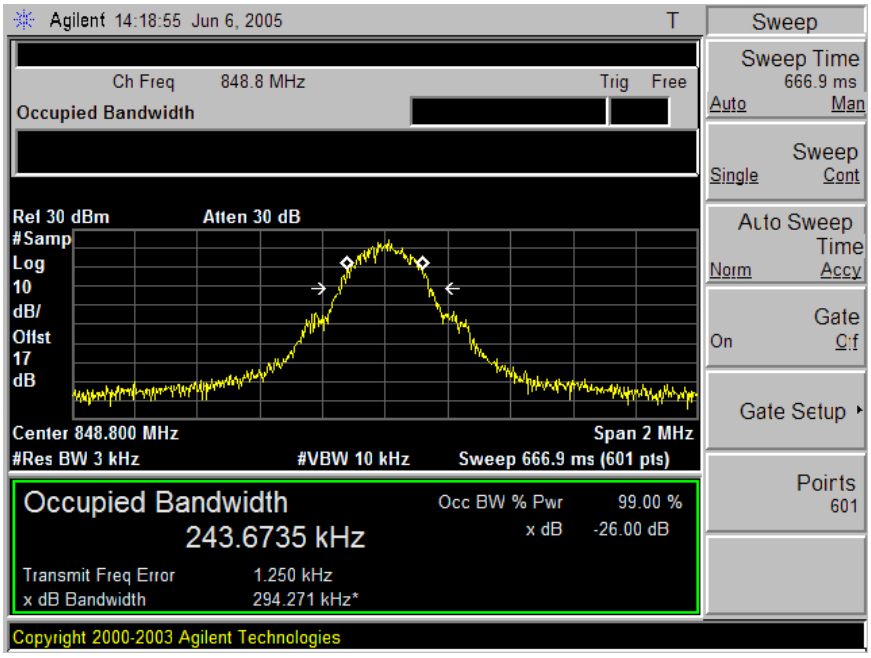

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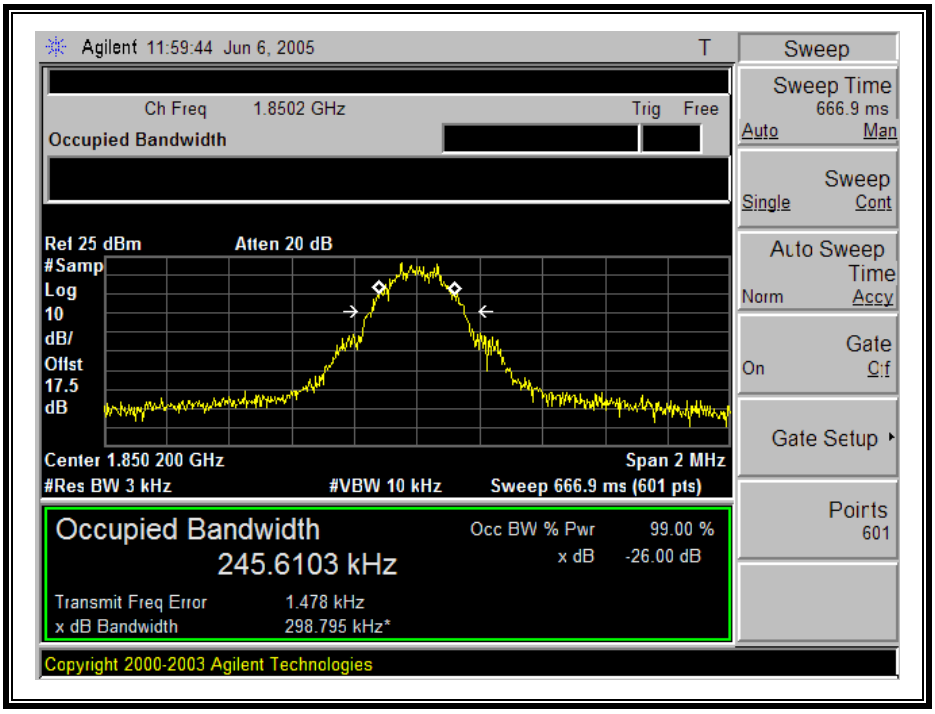
PCS GSM1900 OCCUPIED BANDWIDTH



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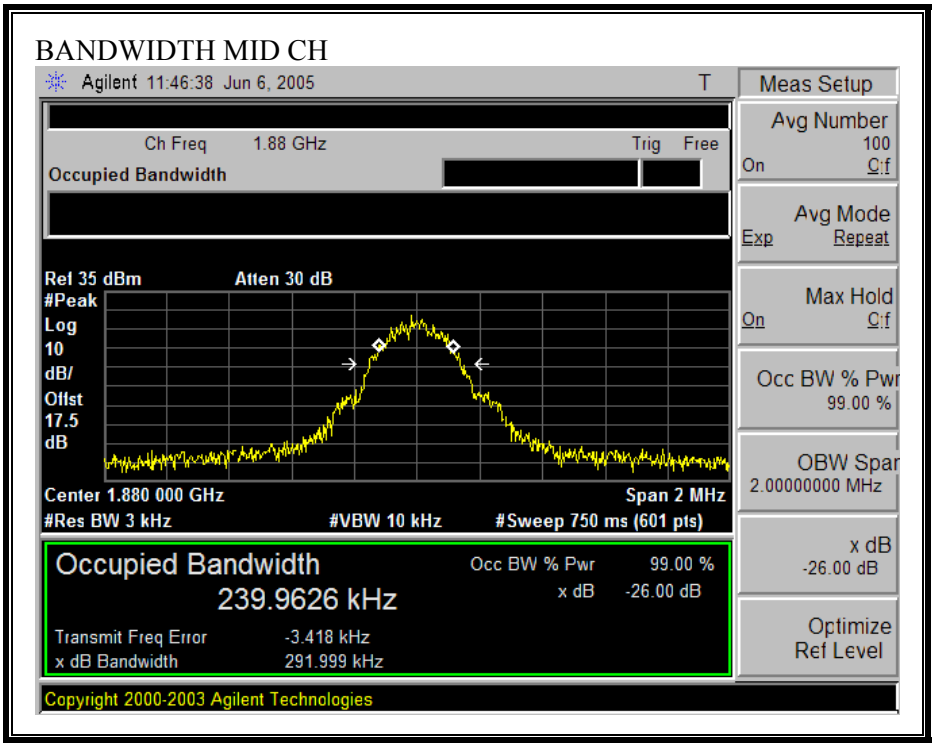
BANDWIDTH MID CH



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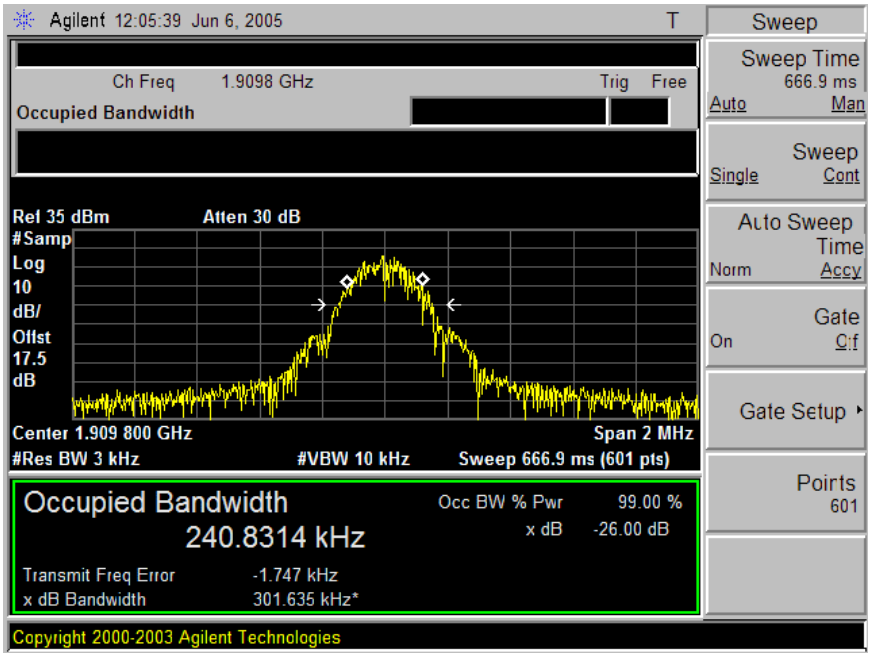
BANDWIDTH HIGH CH



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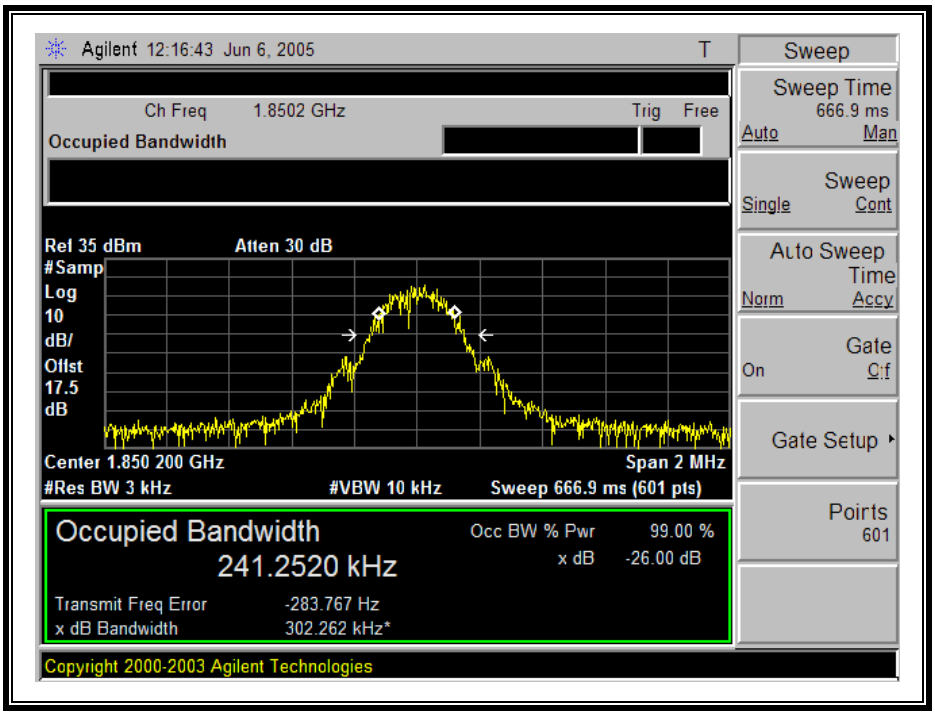
PCS GPRS1900 OCCUPIED BANDWIDTH

BANDWIDTH LOW CH



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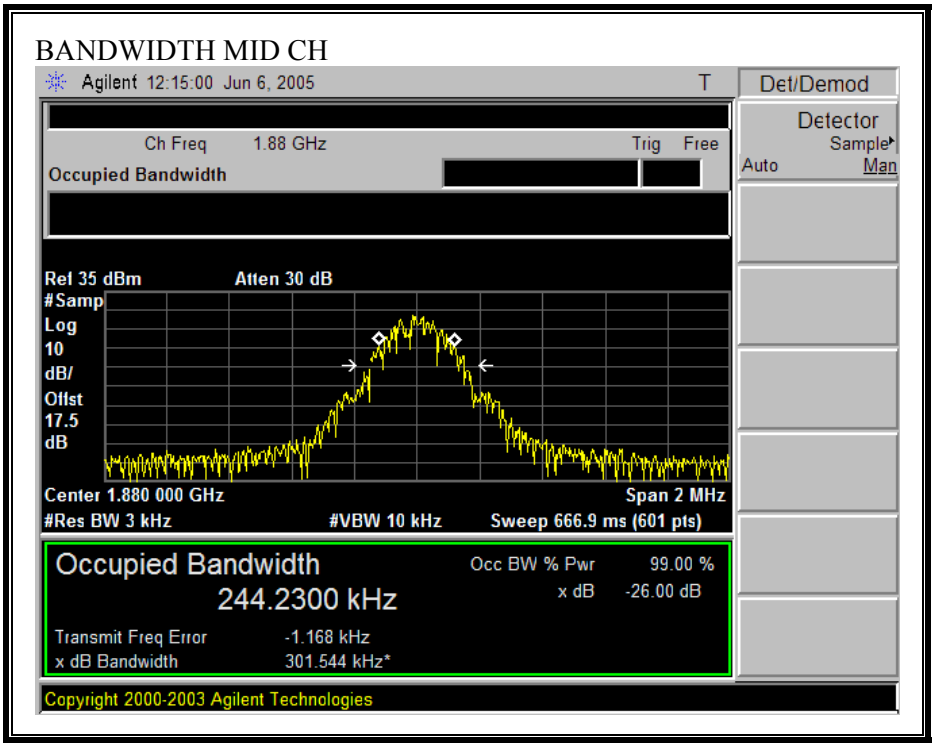
BANDWIDTH MID CH



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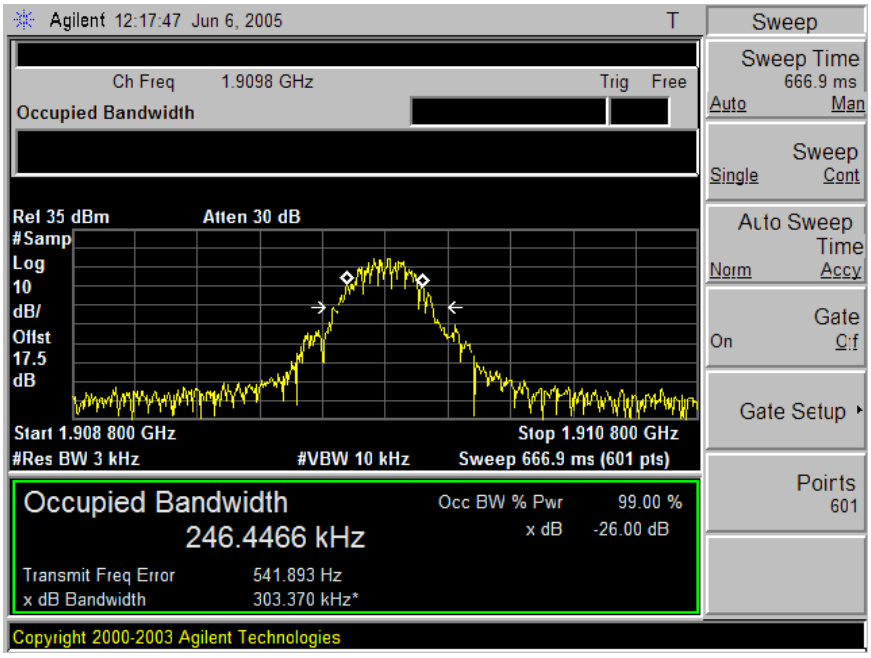
BANDWIDTH HIGH CH



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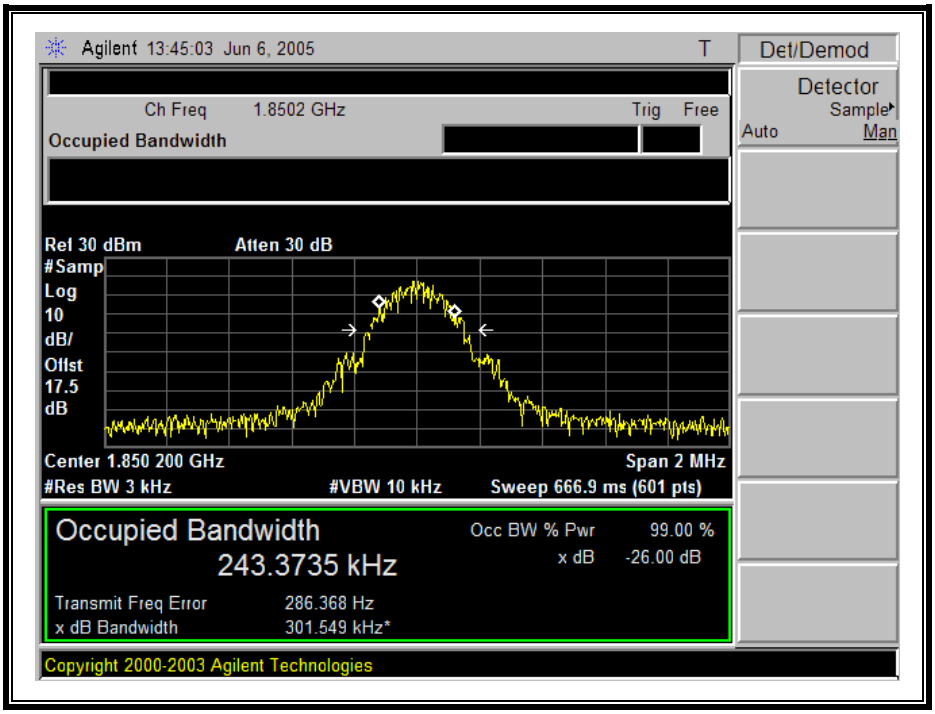
PCS EGPRS1900 OCCUPIED BANDWIDTH



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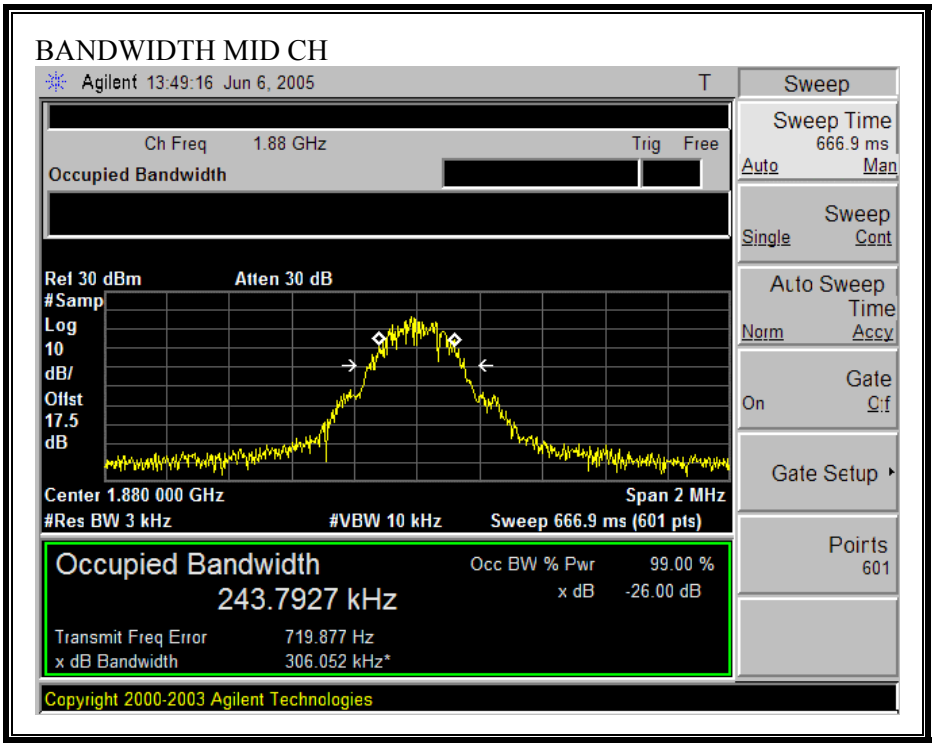
BANDWIDTH MID CH



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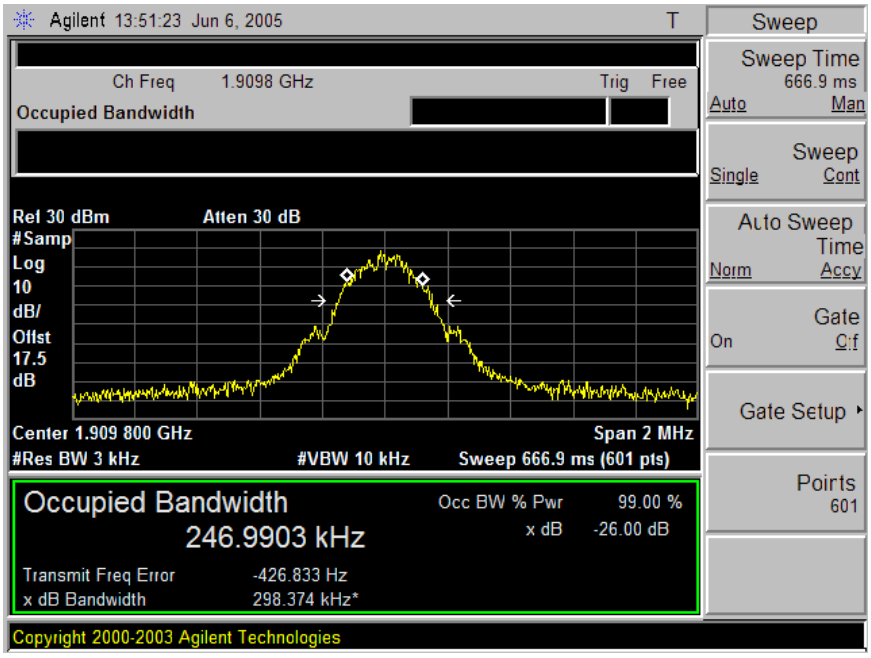
BANDWIDTH HIGH CH



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7.1. RF POWER OUTPUT

LIMIT

22.913(a) The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

24.232(b) Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

TEST PROCEDURE

ANSI / TIA / EIA 603 Clause 2.2.17

RESULTS

No non-compliance noted.

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824 to 849 MHz Authorized Band

Frequency (MHz)	Modulation	Conducted Peak Output Power (dBm)	Radiated ERP (dBm)
824.2	GSM	33.43	30.80
836.4	GSM	33.11	29.90
848.8	GSM	33.29	30.00
824.2	GPRS	33.38	30.40
836.4	GPRS	33.31	30.10
848.8	GPRS	33.22	29.80
824.2	EGPRS	27.82	24.80
836.4	EGPRS	27.72	25.00
848.8	EGPRS	27.40	25.20

GSM1900, 1850 - 1910 MHz Authorized Band

Frequency (MHz)	Modulation	Conducted Peak Output Power (dBm)	Radiated EIRP (dBm)
1850.2	GSM	30.15	30.10
1880	GSM	30.45	31.10
1909.8	GSM	30.01	31.40
1850.2	GPRS	30.67	30.80
1880	GPRS	30.43	30.80
1909.8	GPRS	30.03	31.30
1850.2	EGPRS	27.90	28.30
1880	EGPRS	26.88	28.00
1909.8	EGPRS	26.50	28.20

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GSM850 Output Power (ERP), WIZA100

f MHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
GSM850									
Low Ch									
824.20	99.0	V	26.7	2.0	0.0	24.7	38.5	-13.7	
824.20	107.2	H	32.8	2.0	0.0	30.8	38.5	-7.6	
Mid Ch									
836.40	97.9	V	25.0	2.0	0.0	23.0	38.5	-15.4	
836.40	106.3	H	31.9	2.0	0.0	29.9	38.5	-8.5	
High Ch									
848.80	98.6	V	26.1	2.0	0.0	24.1	38.5	-14.3	
848.80	105.7	H	32.0	2.0	0.0	30.0	38.5	-8.4	
GPRS850									
Low Ch									
824.20	96.8	V	25.0	2.0	0.0	23.0	38.5	-15.4	
824.20	105.8	H	32.4	2.0	0.0	30.4	38.5	-8.0	
Mid Ch									
836.40	96.3	V	24.2	2.0	0.0	22.2	38.5	-16.2	
836.40	105.4	H	32.1	2.0	0.0	30.1	38.5	-8.3	
High Ch									
848.80	97.0	V	25.5	2.0	0.0	23.5	38.5	-14.9	
848.80	105.1	H	31.8	2.0	0.0	29.8	38.5	-8.6	
EGPRS850									
Low Ch									
824.20	91.8	V	21.2	2.0	0.0	19.2	38.5	-19.2	
824.20	100.9	H	26.8	2.0	0.0	24.8	38.5	-13.6	
Mid Ch									
836.40	92.3	V	22.1	2.0	0.0	20.1	38.5	-18.3	
836.40	101.0	H	27.0	2.0	0.0	25.0	38.5	-13.4	
High Ch									
848.80	92.0	V	22.0	2.0	0.0	20.0	38.5	-18.4	
848.80	101.3	H	27.2	2.0	0.0	25.2	38.5	-13.2	

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GSM850 Output Power (ERP), WIZA110

GSM850									
Low Ch									
824.20	97.5	V	24.7	2.0	0.0	22.7	38.5	-15.7	
824.20	105.9	H	32.1	2.0	0.0	30.1	38.5	-8.3	
Mid Ch									
836.40	96.8	V	23.8	2.0	0.0	21.8	38.5	-16.6	
836.40	105.4	H	31.9	2.0	0.0	29.9	38.5	-8.5	
High Ch									
848.80	98.6	V	26.4	2.0	0.0	24.4	38.5	-14.0	
848.80	106.0	H	32.0	2.0	0.0	30.0	38.5	-8.4	
GPRS850									
Low Ch									
824.20	97.0	V	24.2	2.0	0.0	22.2	38.5	-16.3	
824.20	105.5	H	31.6	2.0	0.0	29.6	38.5	-8.8	
Mid Ch									
836.40	96.0	V	22.8	2.0	0.0	20.8	38.5	-17.6	
836.40	105.0	H	31.4	2.0	0.0	29.4	38.5	-9.0	
High Ch									
848.80	96.5	V	24.4	2.0	0.0	22.4	38.5	-16.0	
848.80	106.0	H	32.3	2.0	0.0	30.3	38.5	-8.1	
EGPRS850									
Low Ch									
824.20	93.1	V	21.3	2.0	0.0	19.3	38.5	-19.1	
824.20	100.4	H	26.9	2.0	0.0	24.9	38.5	-13.5	
Mid Ch									
836.40	92.0	V	19.8	2.0	0.0	17.8	38.5	-20.6	
836.40	100.0	H	26.7	2.0	0.0	24.7	38.5	-13.7	
High Ch									
848.80	91.8	V	20.4	2.0	0.0	18.4	38.5	-20.0	
848.80	100.3	H	27.0	2.0	0.0	25.0	38.5	-13.4	

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GSM850 Output Power (ERP), WIZA200

f MHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
GSM850									
Low Ch									
824.20	98.8	V	26.3	2.0	0.0	24.3	38.5	-14.1	
824.20	106.6	H	32.2	2.0	0.0	30.2	38.5	-8.2	
Mid Ch									
836.40	97.3	V	24.5	2.0	0.0	22.5	38.5	-15.9	
836.40	105.5	H	31.7	2.0	0.0	29.7	38.5	-8.7	
High Ch									
848.80	97.9	V	25.9	2.0	0.0	23.9	38.5	-14.5	
848.80	106.2	H	31.8	2.0	0.0	29.8	38.5	-8.6	
GPRS850									
Low Ch									
824.20	97.0	V	25.5	2.0	0.0	23.5	38.5	-14.9	
824.20	105.5	H	31.6	2.0	0.0	29.6	38.5	-8.8	
Mid Ch									
836.40	96.4	V	24.0	2.0	0.0	22.0	38.5	-16.4	
836.40	105.0	H	31.5	2.0	0.0	29.5	38.5	-8.9	
High Ch									
848.80	97.6	V	25.3	2.0	0.0	23.3	38.5	-15.1	
848.80	106.5	H	32.5	2.0	0.0	30.5	38.5	-7.9	
EGPRS850									
Low Ch									
824.20	90.3	V	20.6	2.0	0.0	18.6	38.5	-19.8	
824.20	99,2	H	26.5	2.0	0.0	24.5	38.5	-13.9	
Mid Ch									
836.40	88.8	V	19.8	2.0	0.0	17.8	38.5	-20.6	
836.40	99.5	H	26.7	2.0	0.0	24.7	38.5	-13.7	
High Ch									
848.80	90.6	V	20.9	2.0	0.0	18.9	38.5	-19.5	
848.80	98.5	H	26.4	2.0	0.0	24.4	38.5	-14.0	

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GSM1900 Output Power (EIRP), WIZA 100

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
GSM1900										
low ch										
1.850	92.0	V	24.1	0.5	4.6	2.5	28.2	33.0	-4.8	
1.850	95.4	H	26.0	0.5	4.6	2.5	30.1	33.0	-2.9	
Mid Ch		H								
1.880	90.5	V	23.5	0.5	4.7	2.5	27.7	33.0	-5.3	
1.880	95.5	H	26.9	0.5	4.7	2.5	31.1	33.0	-1.9	
High Ch										
1.910	93.3	V	25.1	0.5	4.7	2.6	29.3	33.0	-3.7	
1.910	95.5	H	27.2	0.5	4.7	2.6	31.4	33.0	-1.6	
GPRS1900										
low ch										
1.850	92.4	V	24.5	0.5	4.6	2.5	28.6	33.0	-4.4	
1.850	95.1	H	26.7	0.5	4.6	2.5	30.8	33.0	-2.2	
Mid Ch										
1.880	91.6	V	24.6	0.5	4.7	2.5	28.8	33.0	-4.2	
1.880	94.9	H	26.6	0.5	4.7	2.5	30.8	33.0	-2.2	
High Ch										
1.910	91.3	V	24.1	0.5	4.7	2.6	28.3	33.0	-4.7	
1.910	94.4	H	27.1	0.5	4.7	2.6	31.3	33.0	-1.7	
EGPRS1900										
low ch										
1.850	89.3	V	20.5	0.5	4.6	2.5	24.6	33.0	-8.4	
1.850	93.2	H	24.2	0.5	4.6	2.5	28.3	33.0	-4.7	
Mid Ch										
1.880	88.4	V	21.4	0.5	4.7	2.5	25.6	33.0	-7.4	
1.880	92.6	H	23.8	0.5	4.7	2.5	28.0	33.0	-5.0	
High Ch										
1.910	89.0	V	20.8	0.5	4.7	2.6	25.0	33.0	-8.0	
1.910	93.0	H	24.0	0.5	4.7	2.6	28.2	33.0	-4.8	

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GSM1900 Output Power (EIRP), WIZA 110

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
GSM1900										
low ch										
1.850	91.8	V	23.0	0.5	4.6	2.5	27.1	33.0	-5.9	
1.850	95.4	H	26.0	0.5	4.6	2.5	30.1	33.0	-2.9	
Mid Ch										
1.880	91.0	V	24.0	0.5	4.7	2.5	28.2	33.0	-4.8	
1.880	94.4	H	25.8	0.5	4.7	2.5	30.0	33.0	-3.0	
High Ch										
1.910	90.3	V	22.0	0.5	4.7	2.6	26.2	33.0	-6.8	
1.910	93.7	H	25.4	0.5	4.7	2.6	29.6	33.0	-3.4	
GPRS1900										
low ch										
1.850	93.1	V	24.2	0.5	4.6	2.5	28.3	33.0	-4.7	
1.850	95.5	H	26.3	0.5	4.6	2.5	30.4	33.0	-2.6	
Mid Ch										
1.880	92.7	V	25.7	0.5	4.7	2.5	29.9	33.0	-3.1	
1.880	94.2	H	26.4	0.5	4.7	2.5	30.6	33.0	-2.4	
High Ch										
1.910	90.5	V	22.5	0.5	4.7	2.6	26.7	33.0	-6.3	
1.910	94.3	H	26.0	0.5	4.7	2.6	30.2	33.0	-2.8	
EGPRS1900										
low ch										
1.850	88.1	V	19.8	0.5	4.6	2.5	23.9	33.0	-9.1	
1.850	93.7	H	24.0	0.5	4.6	2.5	28.1	33.0	-4.9	
Mid Ch										
1.880	88.5	V	21.5	0.5	4.7	2.5	25.7	33.0	-7.3	
1.880	93.6	H	24.1	0.5	4.7	2.5	28.3	33.0	-4.7	
High Ch										
1.910	89.0	V	19.9	0.5	4.7	2.6	24.1	33.0	-8.9	
1.910	92.4	H	23.8	0.5	4.7	2.6	28.0	33.0	-5.0	

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GSM1900 Output Power (EIRP), WIZA 200

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
GSM1900										
low ch										
1.850	92.0	V	23.7	0.5	4.6	2.5	27.8	33.0	-5.2	
1.850	96.0	H	27.0	0.5	4.6	2.5	31.1	33.0	-1.9	
Mid Ch		H								
1.880	90.5	V	22.8	0.5	4.7	2.5	27.0	33.0	-6.0	
1.880	95.0	H	25.2	0.5	4.7	2.5	29.4	33.0	-3.6	
High Ch										
1.910	91.2	V	24.4	0.5	4.7	2.6	28.6	33.0	-4.4	
1.910	94.0	H	26.0	0.5	4.7	2.6	30.2	33.0	-2.8	
GPRS1900										
low ch										
1.850	92.4	V	24.3	0.5	4.6	2.5	28.4	33.0	-4.6	
1.850	93.6	H	25.8	0.5	4.6	2.5	29.9	33.0	-3.1	
Mid Ch										
1.880	91.5	V	24.6	0.5	4.7	2.5	28.8	33.0	-4.2	
1.880	93.9	H	26.0	0.5	4.7	2.5	30.2	33.0	-2.8	
High Ch										
1.910	91.0	V	24.5	0.5	4.7	2.6	28.7	33.0	-4.3	
1.910	94.3	H	26.6	0.5	4.7	2.6	30.8	33.0	-2.2	
EGPRS1900										
low ch										
1.850	89.5	V	21.6	0.5	4.6	2.5	25.7	33.0	-7.3	
1.850	94.3	H	24.0	0.5	4.6	2.5	28.1	33.0	-4.9	
Mid Ch										
1.880	89.3	V	21.4	0.5	4.7	2.5	25.6	33.0	-7.4	
1.880	94.0	H	23.8	0.5	4.7	2.5	28.0	33.0	-5.0	
High Ch										
1.910	88.6	V	20.5	0.5	4.7	2.6	24.7	33.0	-8.3	
1.910	93.4	H	23.4	0.5	4.7	2.6	27.6	33.0	-5.4	

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8.2. FREQUENCY STABILITY

LIMIT

§22.355 Except as otherwise provided in this part, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table C–1 of this section.

For Mobile devices operating in the 824 to 849 MHz band at a power level less than or equal to 3 Watts, the limit specified in Table C-1 is +/- 2.5 ppm.

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

TEST PROCEDURE

ANSI / TIA / EIA 603 Clause 2.3.1 and 2.3.2

RESULTS

No non-compliance noted.

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GSM 850

Reference Frequency: Mid Channel 836.490000MHz @ 25°C Limit: ± 2.5 ppm = 2091.003 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measureed with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.70	50	836.4015750	-0.526	± 2.5
3.70	40	836.4013120	-0.212	± 2.5
3.70	30	836.4008753	0.310	± 2.5
3.70	***25***	***836.40113500***	***0***	***± 2.5***
3.70	20	836.40069450	0.527	± 2.5
3.70	10	836.40075891	0.450	± 2.5
3.70	0	836.40035484	0.933	± 2.5
3.70	-10	836.40132505	-0.227	± 2.5
3.70	-20	836.40167907	-0.650	± 2.5
3.70	-30	836.40196854	-0.997	± 2.5
3.145	25	836.40113446	0.001	± 2.5
4.255	25	836.40106200	0.087	± 2.5

GSM 1900

Reference Frequency: PCS Mid Channel 1880MHz @ 25°C Limit: to stay within the authorized block				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measureed with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.70	50	1880.0008300	-0.428	± 2.5
3.70	40	1880.0009190	-0.476	± 2.5
3.70	30	1880.0008270	-0.427	± 2.5
3.70	***25***	***1880.0000250***	0.000	***± 2.5***
3.70	20	1880.0002864	-0.139	± 2.5
3.70	10	1880.0006970	-0.357	± 2.5
3.70	0	1880.0005186	-0.263	± 2.5
3.70	-10	1880.0002570	-0.123	± 2.5
3.70	-20	1880.0003690	-0.183	± 2.5
3.70	-30	1880.0009090	-0.470	± 2.5
3.145	25	1880.0001729	-0.079	± 2.5
4.255	25	1880.0002750	-0.133	± 2.5

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8.3. SPURIOUS EMISSION AT ANTENNA TERMINAL

LIMIT

§22.917 (a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

§24.238 (a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

TEST PROCEDURE

ANSI / TIA / EIA 603 Clause 3.2.13 & FCC 22.917 (b)
ANSI / TIA / EIA 603 Clause 3.2.12 & FCC 24.238 (b)

RESULTS

No non-compliance noted.

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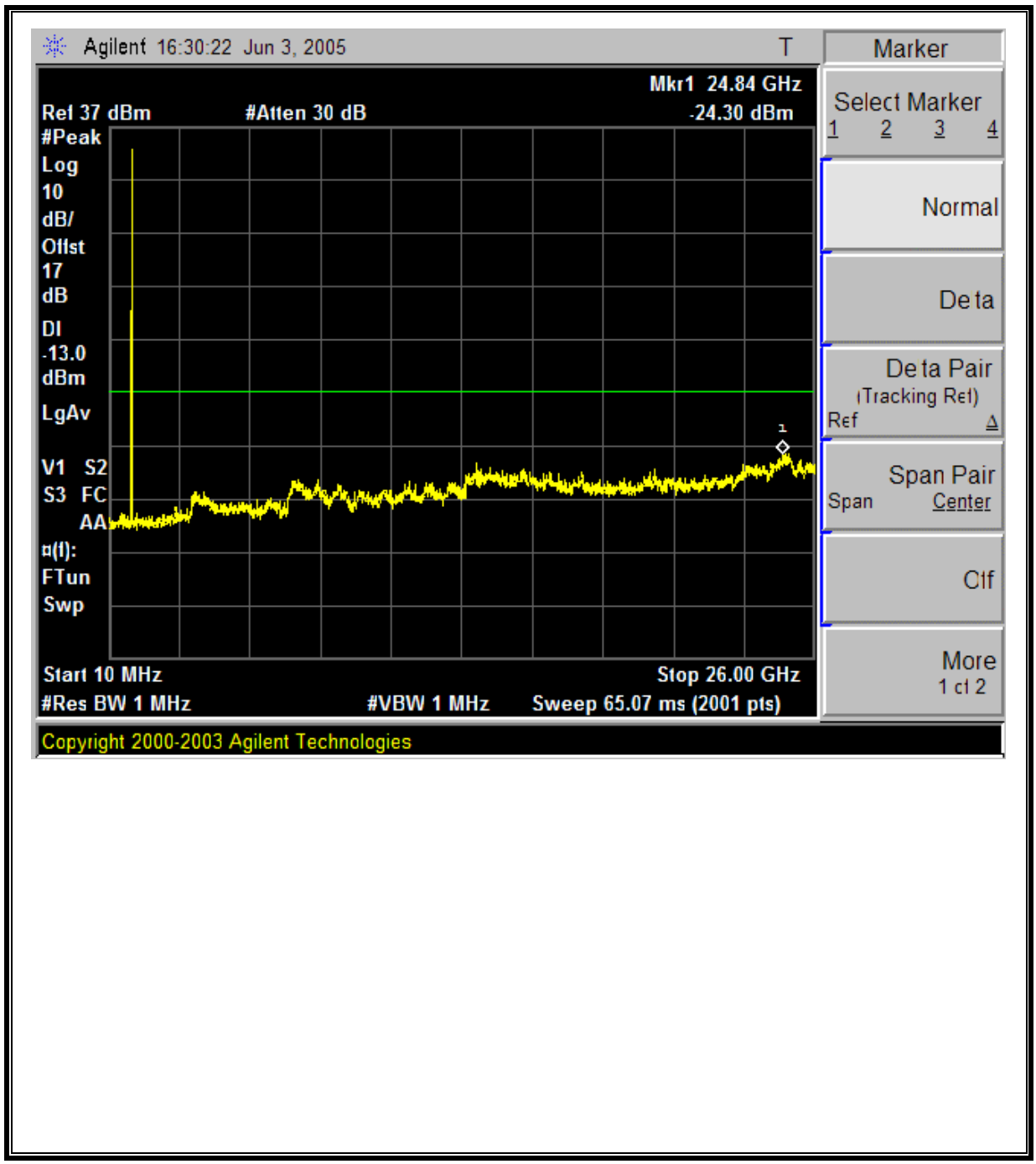
GSM850 MODULATION RESULTS

Low Channel, Out-Of-Band Emissions



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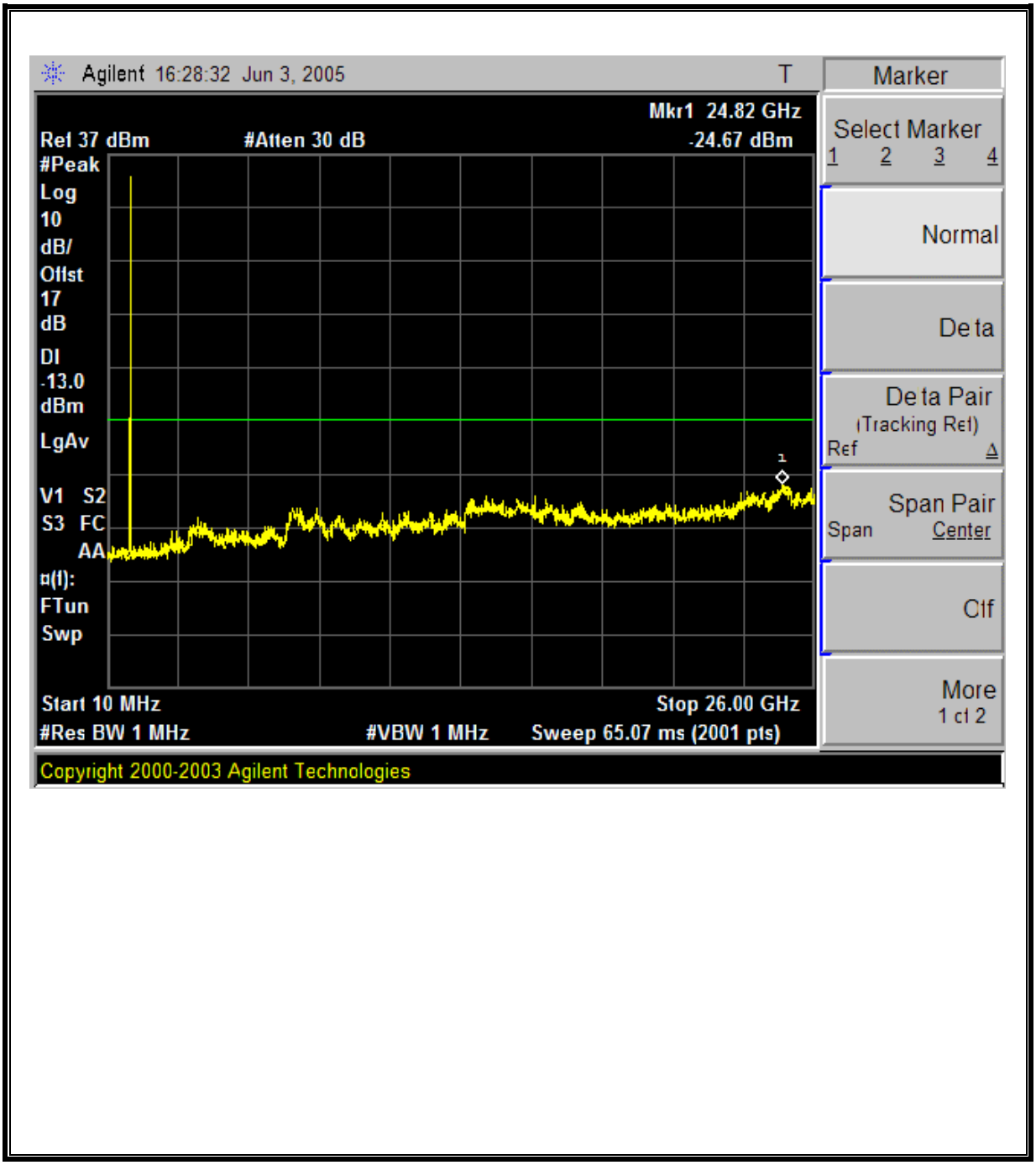
Mid Channel, Out-Of-Band Emissions



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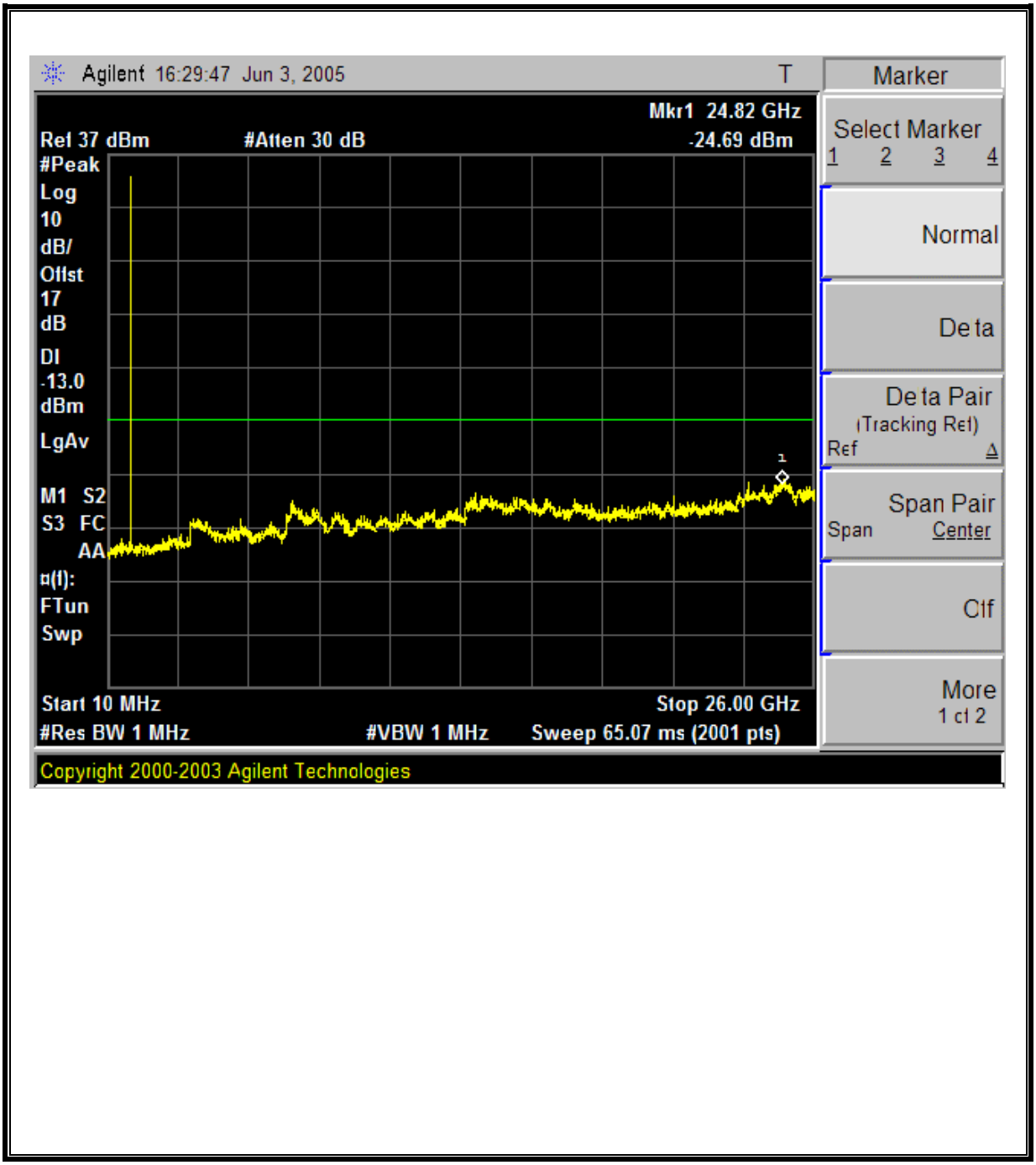
High Channel, Out-Of-Band Emissions



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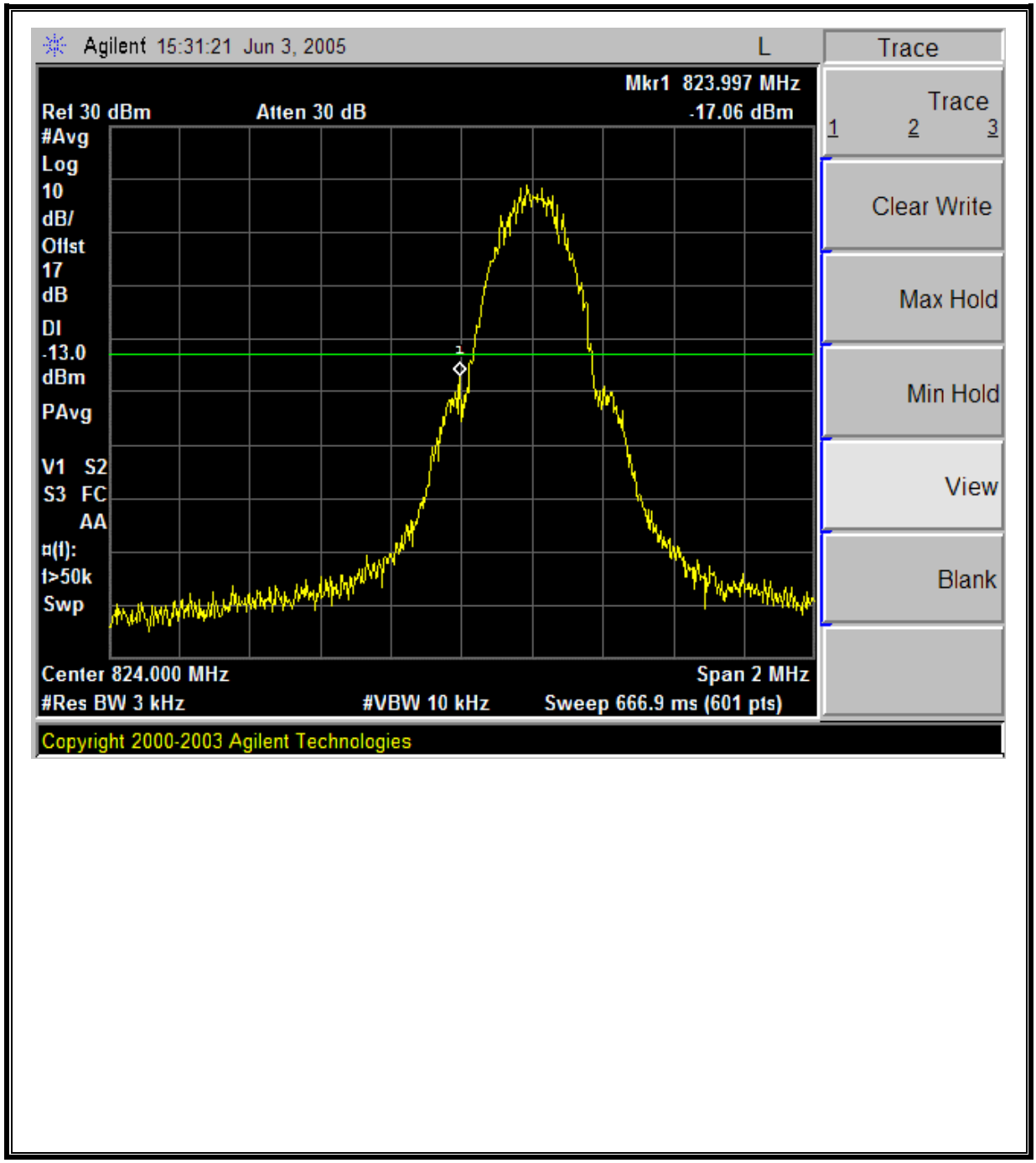
Low Channel Band Edge



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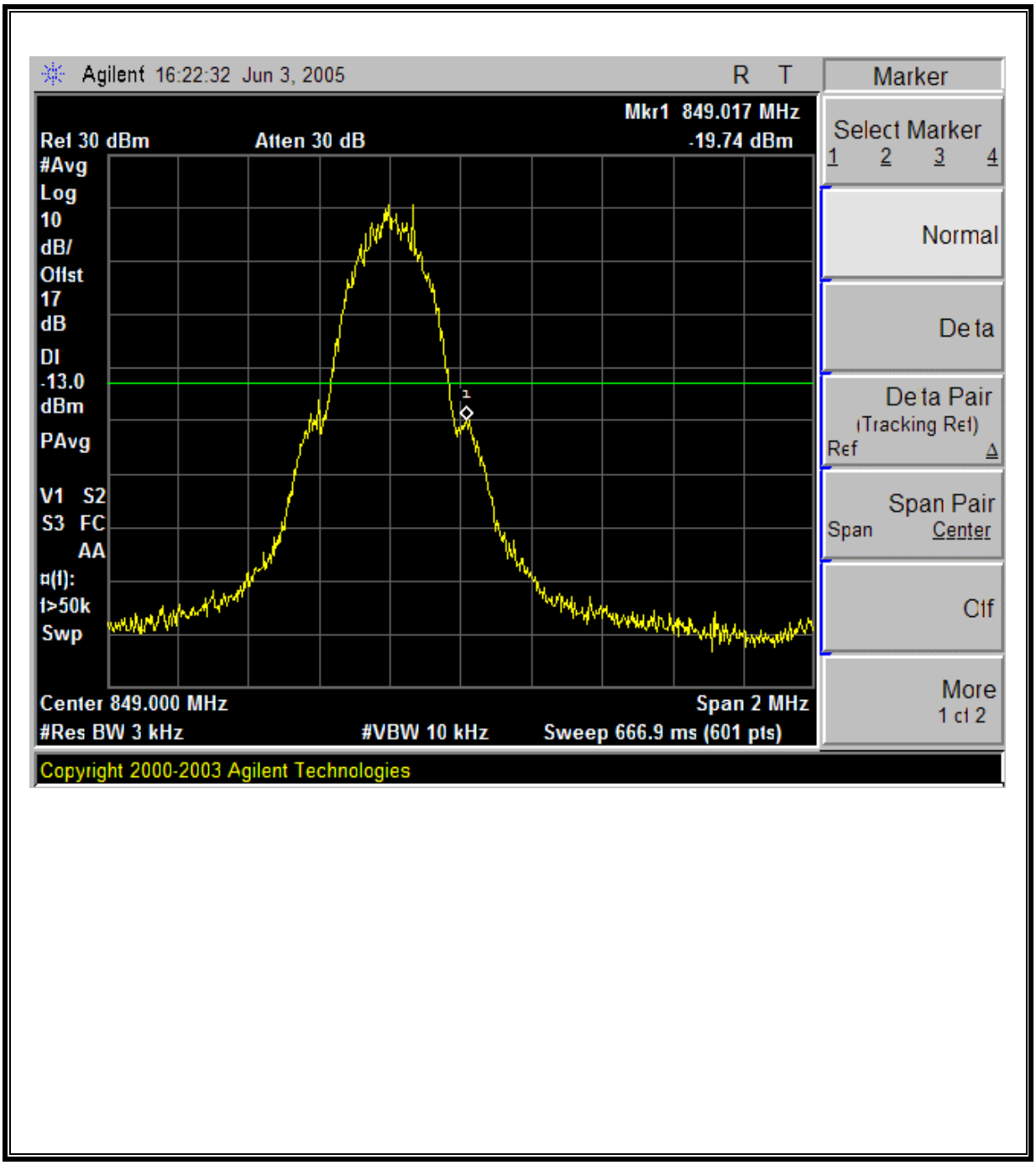
High Channel Band Edge



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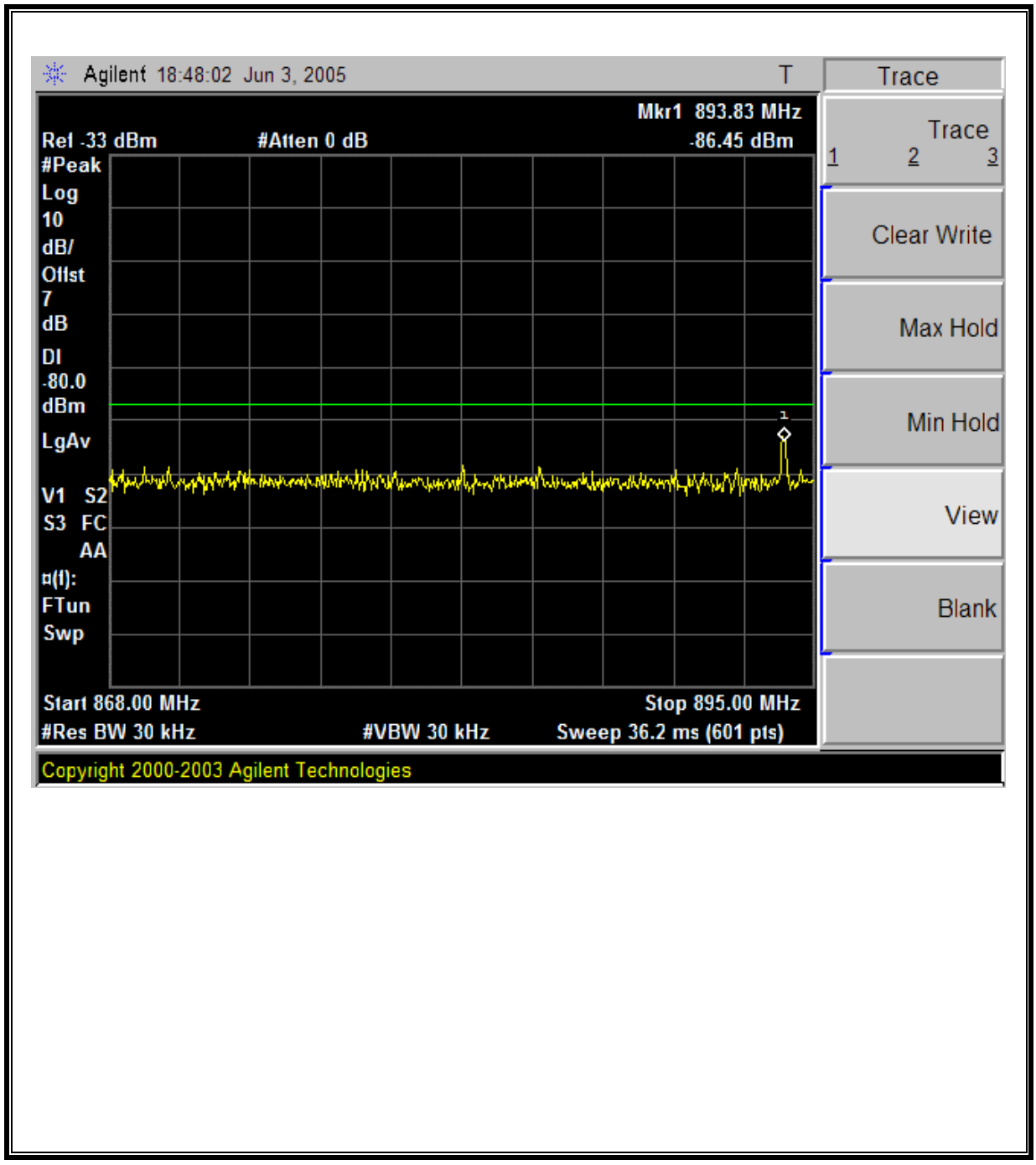
Mobile Emissions in Base Frequency Range



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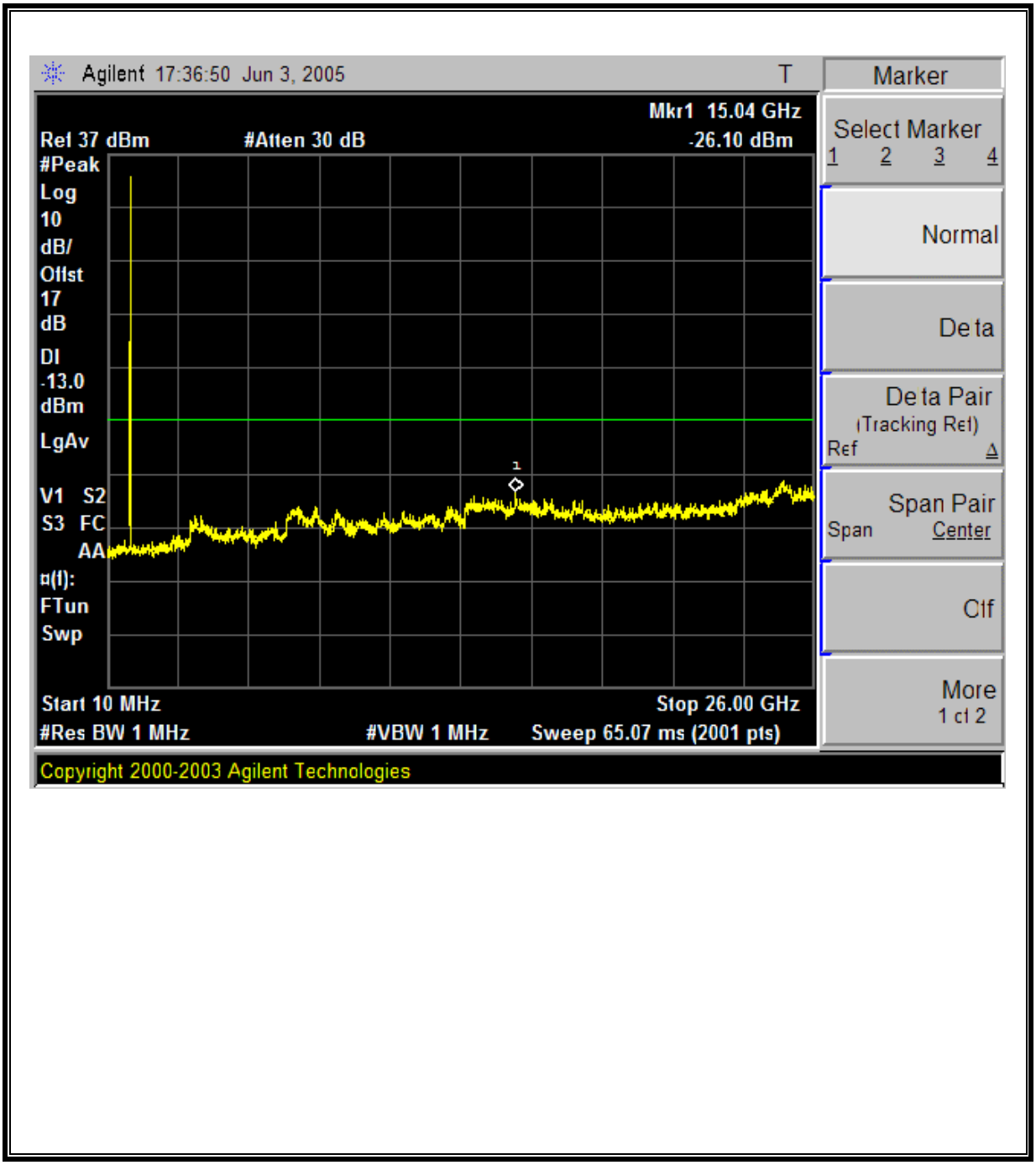
GPRS850 MODULATION RESULTS

Low Channel Out-Of-Band Emissions



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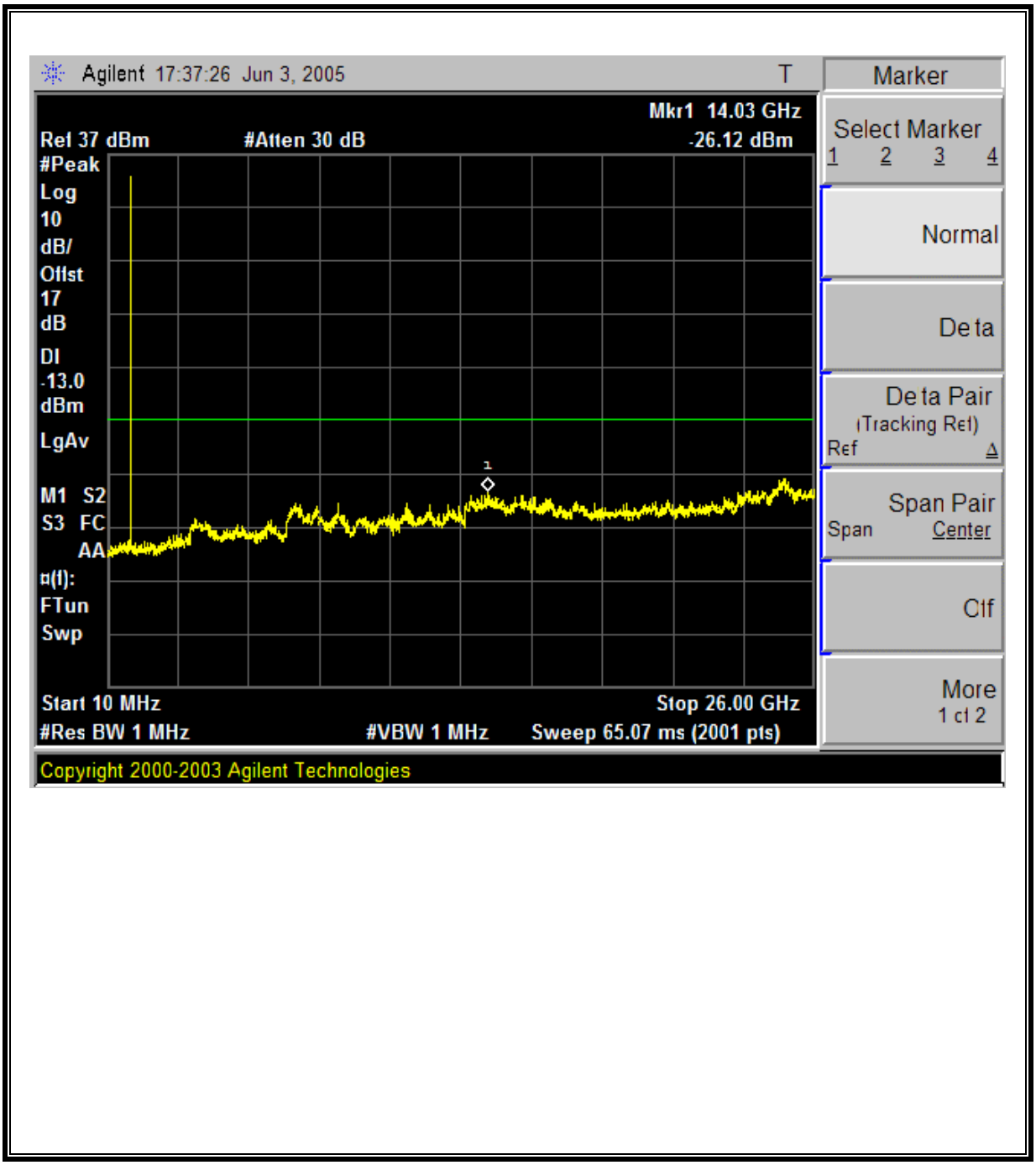
Mid Channel Out-Of-Band Emissions



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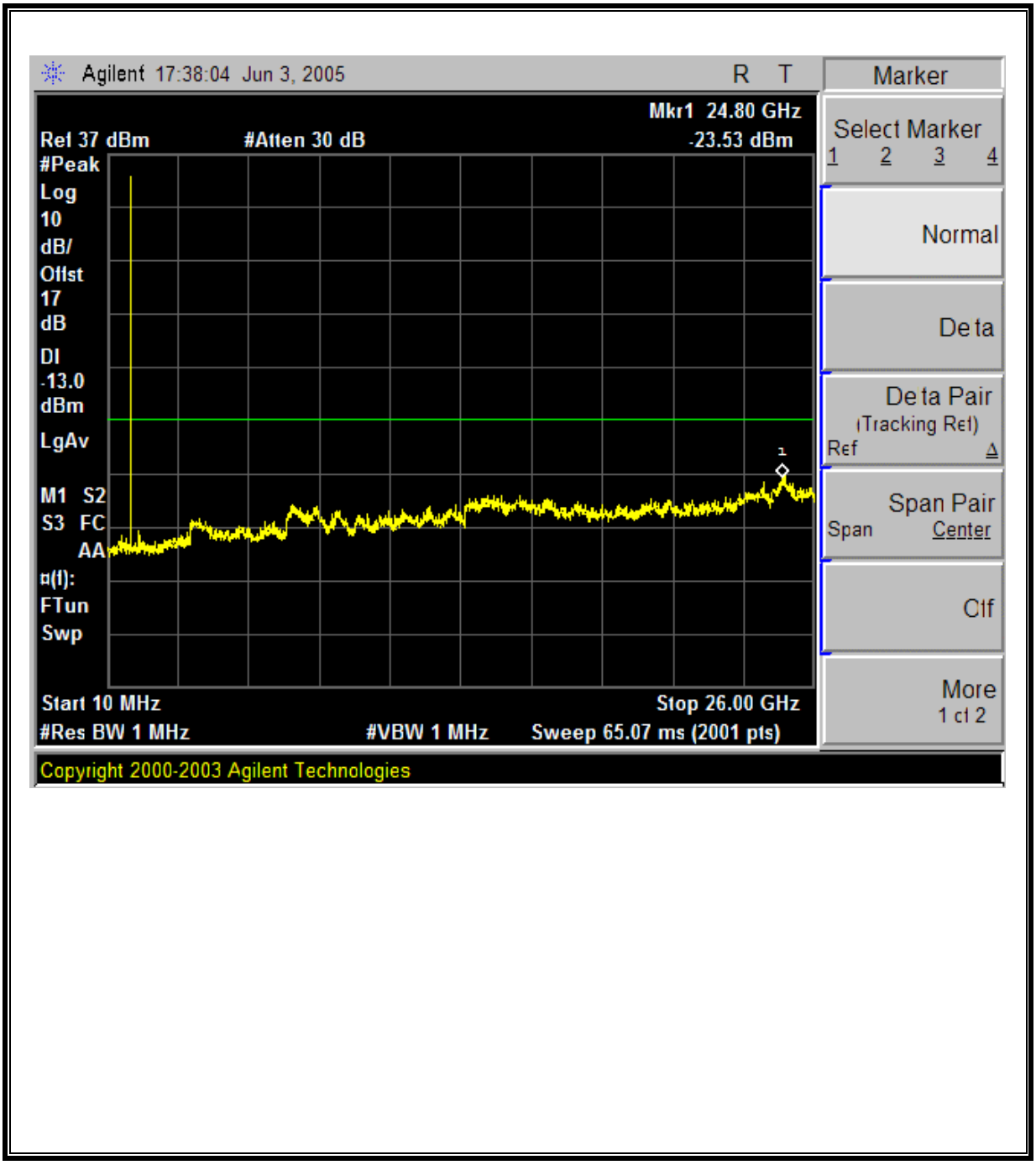
High Channel Out-Of-Band Emissions



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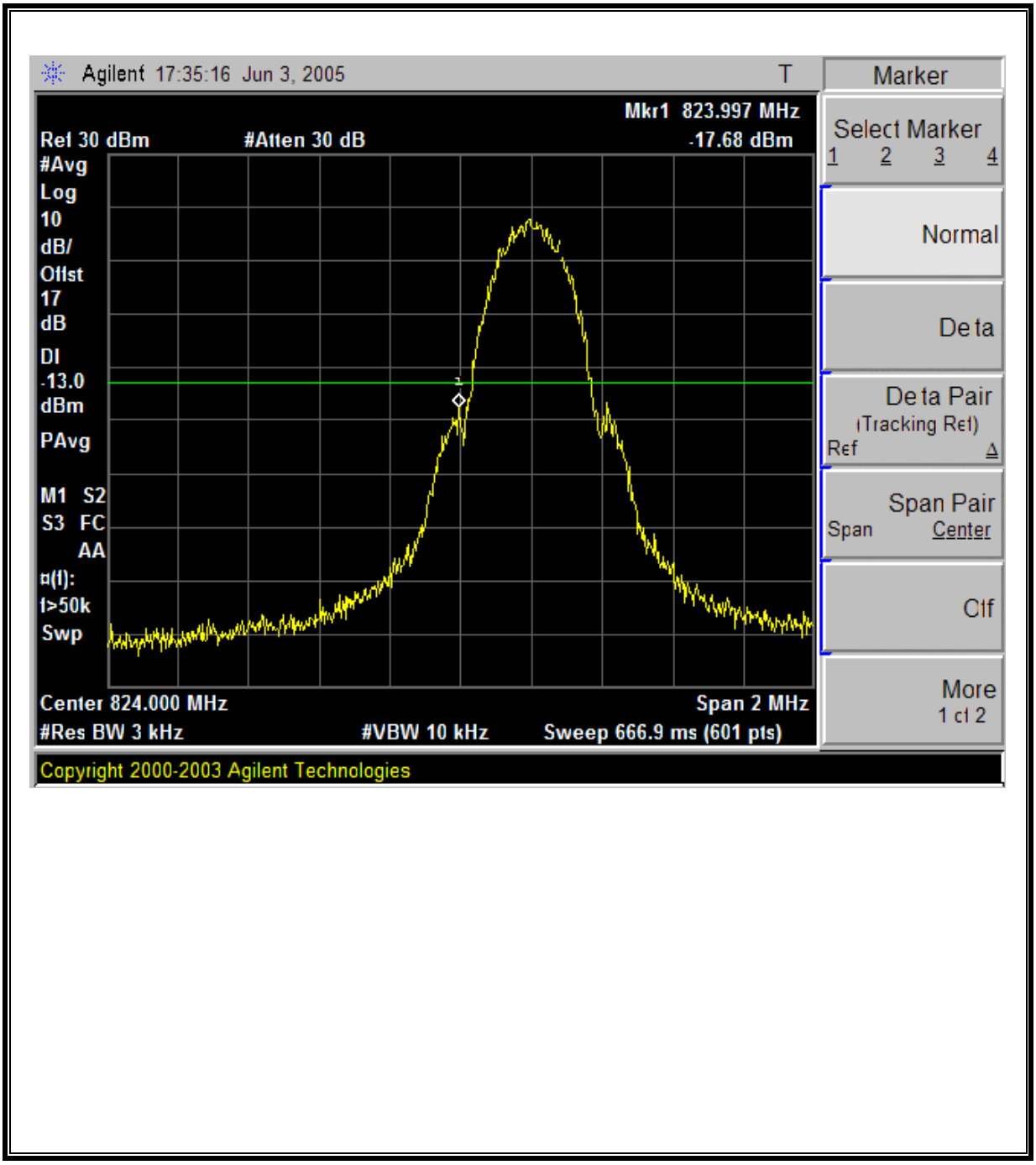
LOW Channel Band Edge



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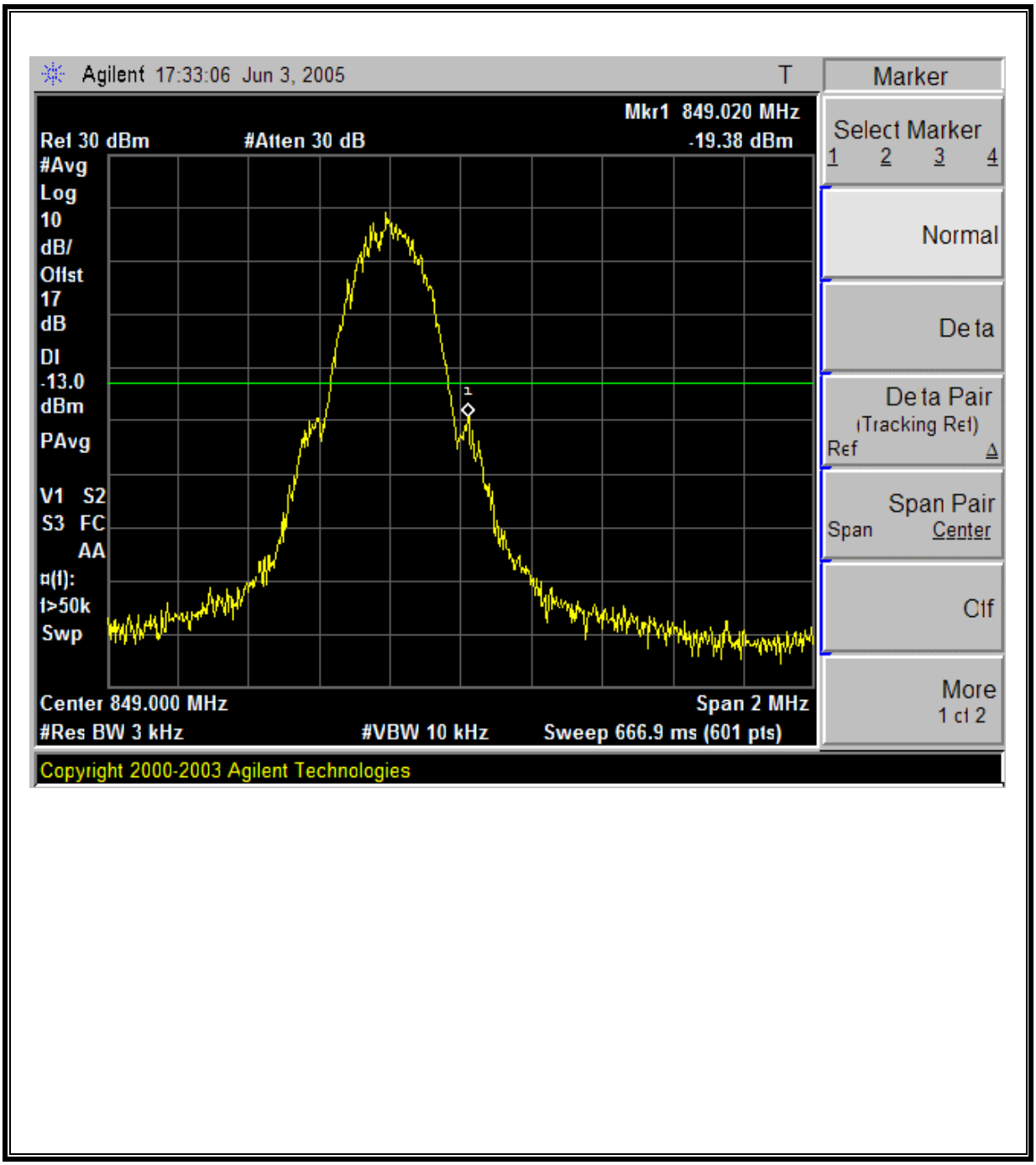
HIGH Channel Band Edge



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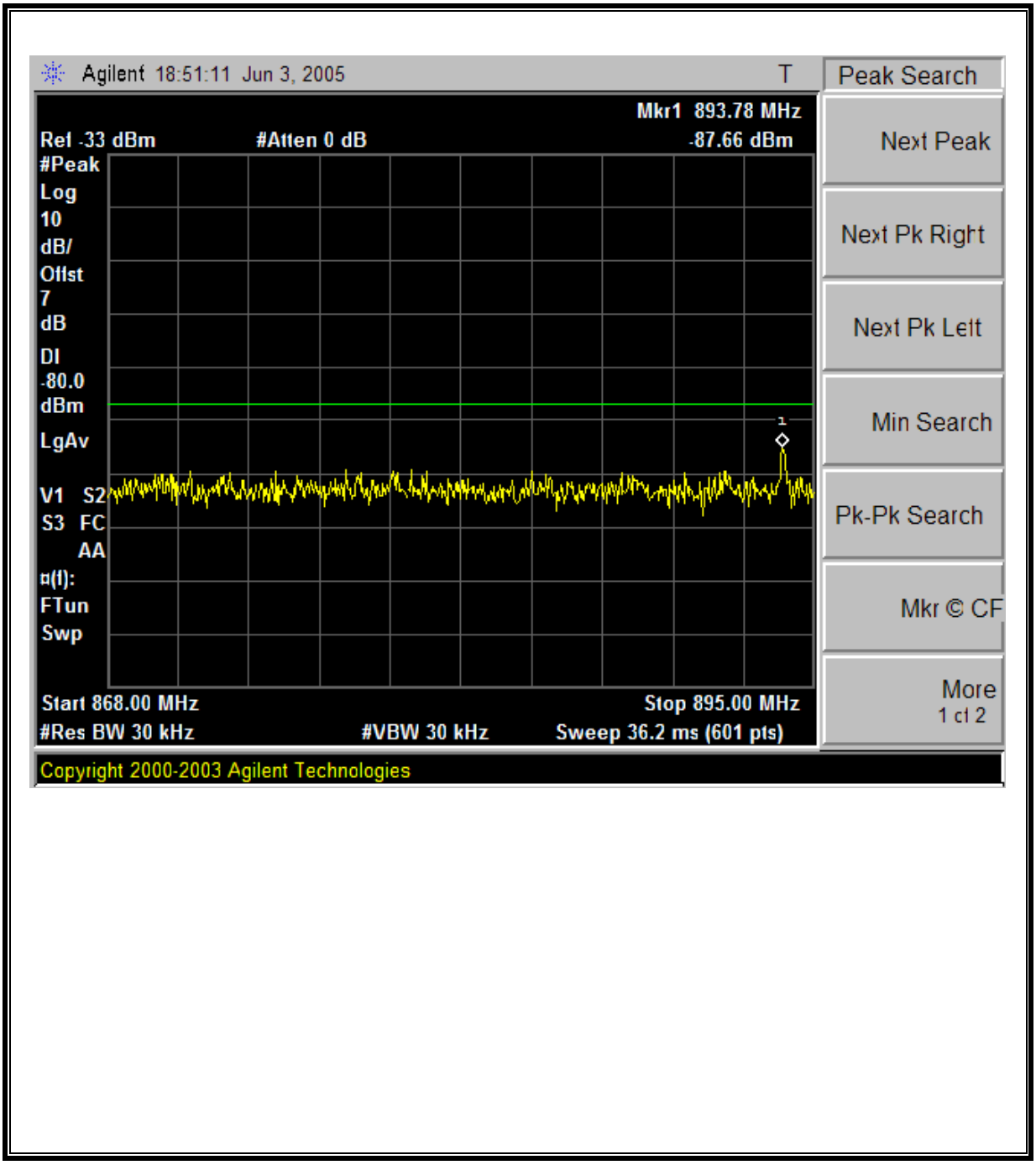
Mobile Emissions in Base Frequency Range



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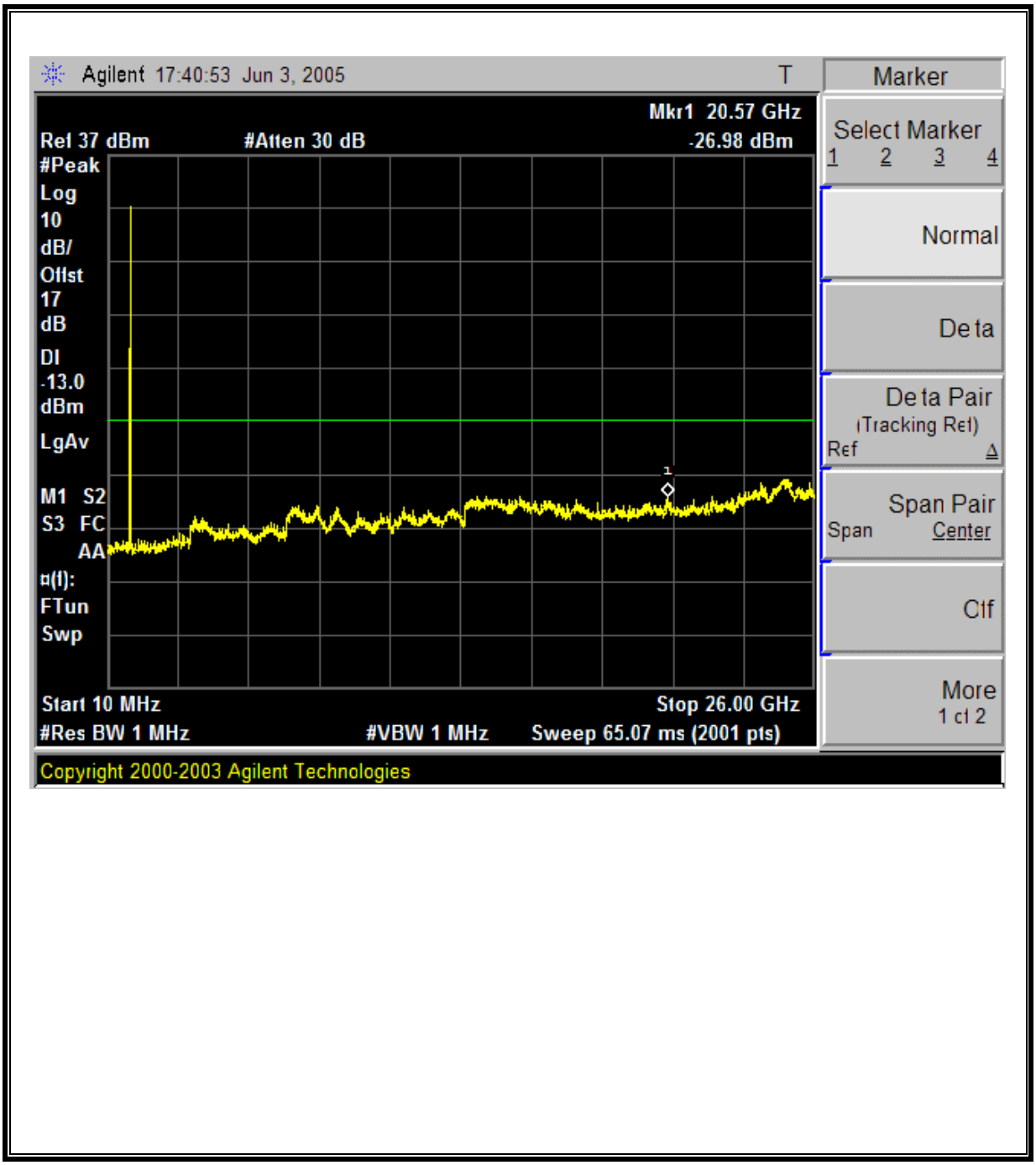
EGPRS850 MODULATION RESULTS

Low Channel Out-Of-Band Emissions



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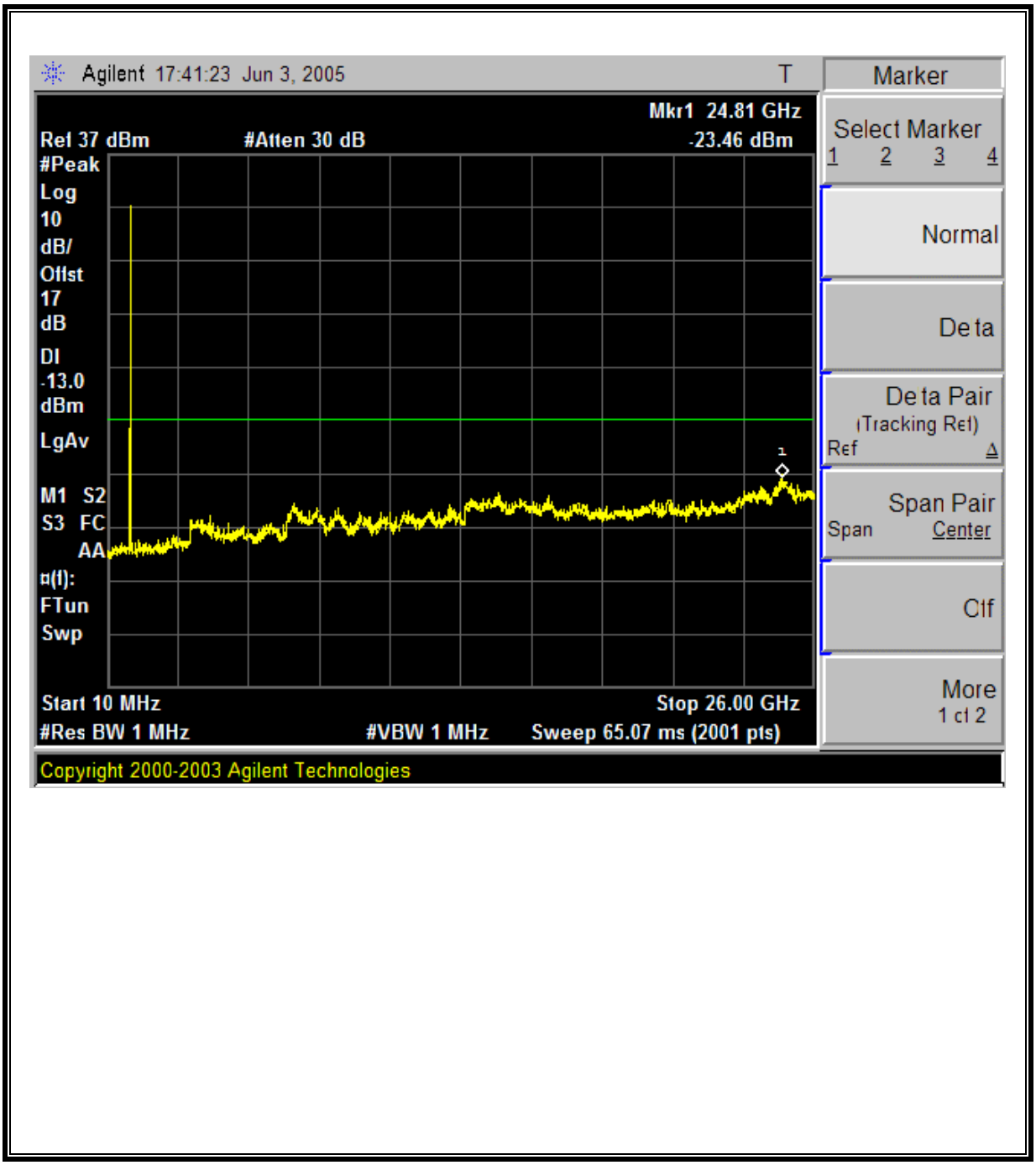
Mid Channel Out-Of-Band Emissions



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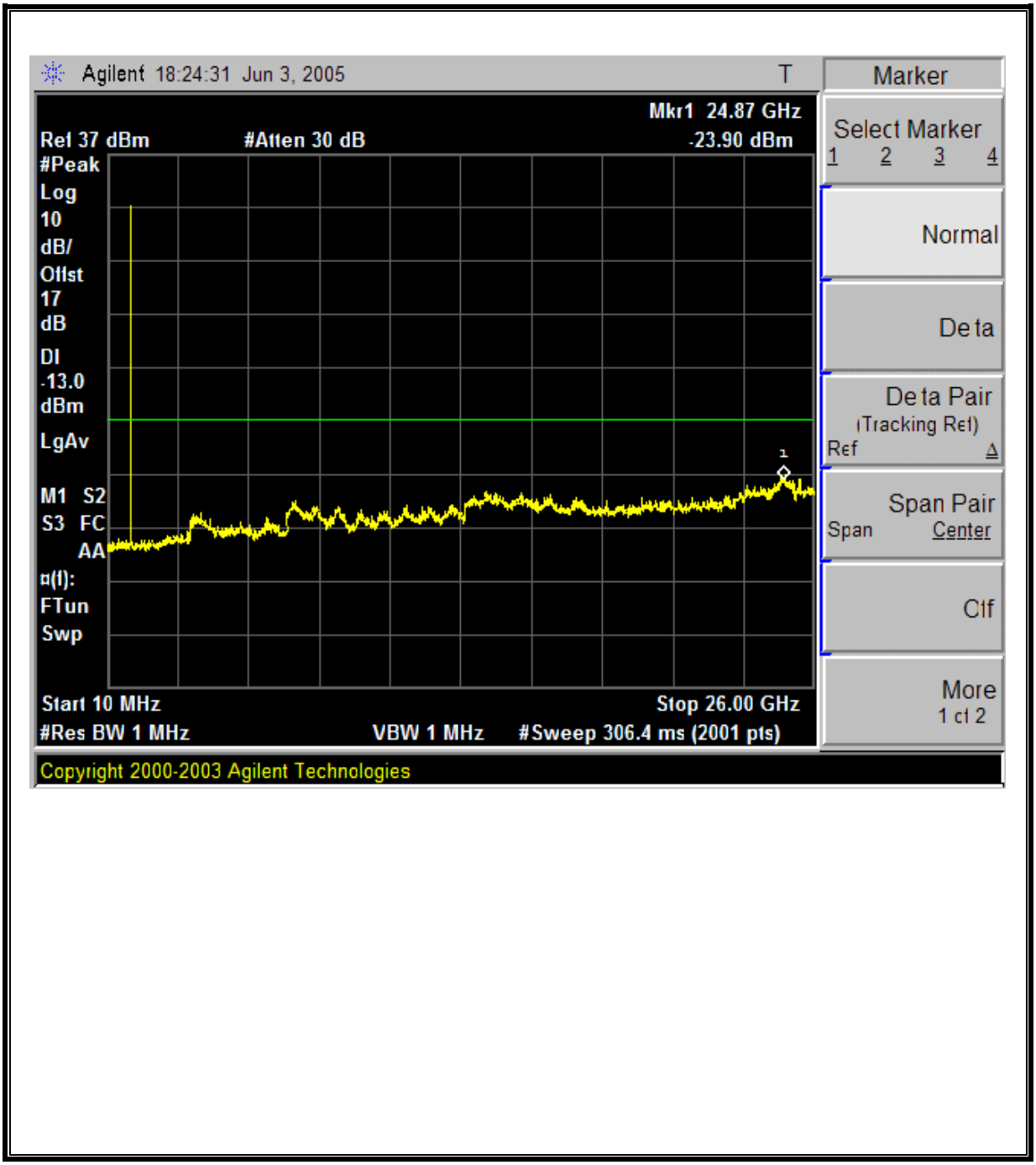
High Channel Out-Of-Band Emissions



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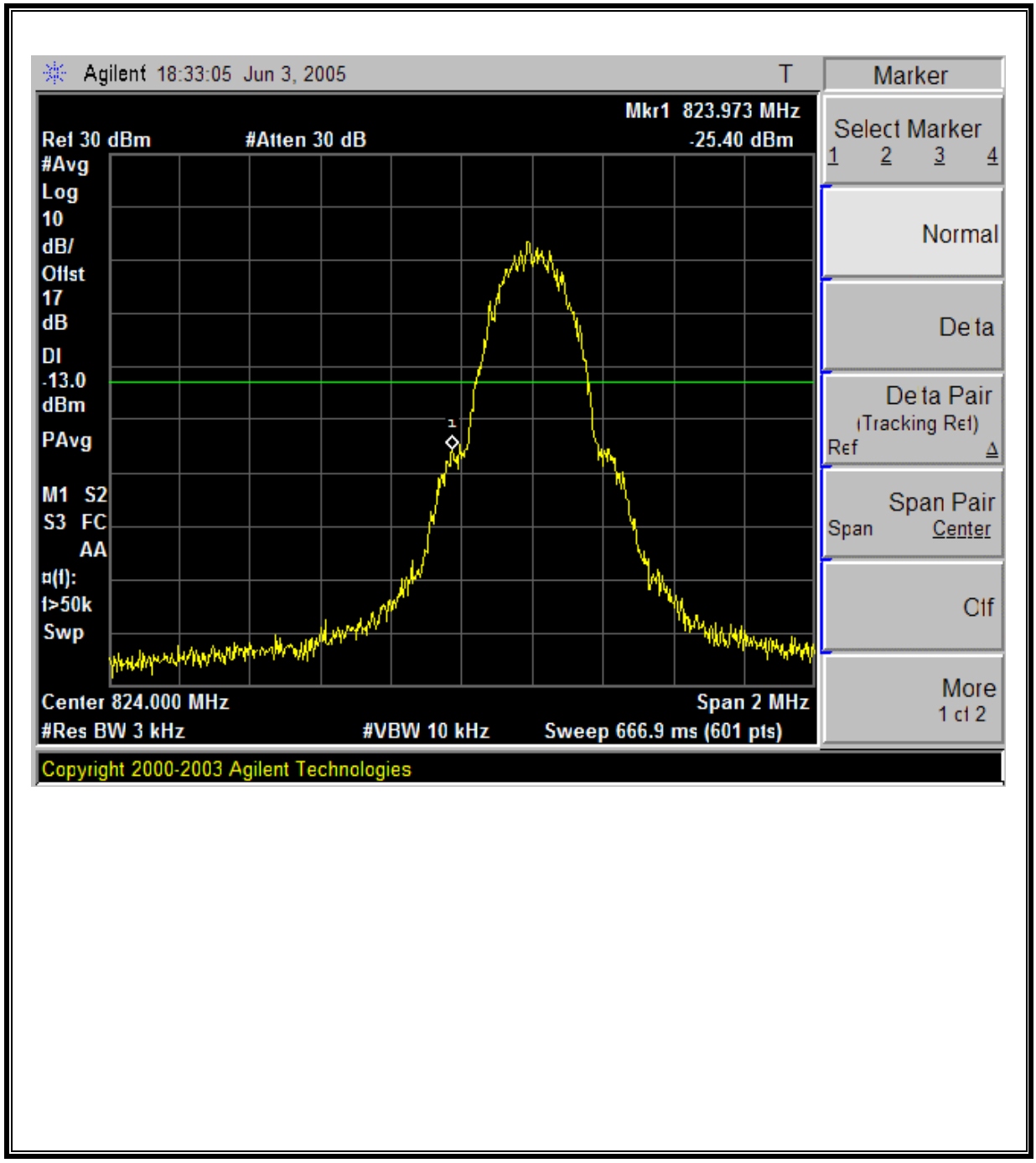
LOW Channel Band Edge



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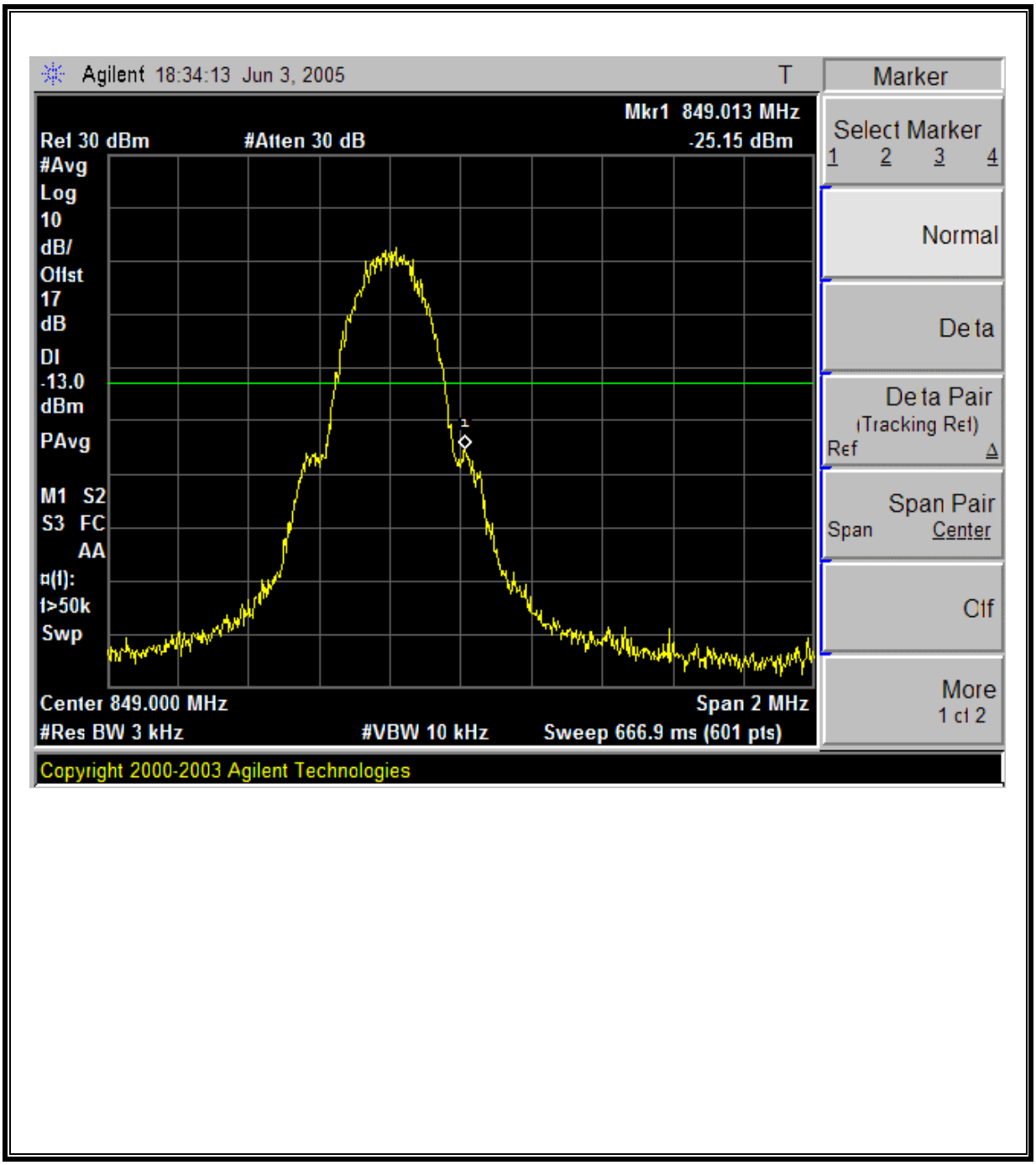
HIGH Channel Band Edge



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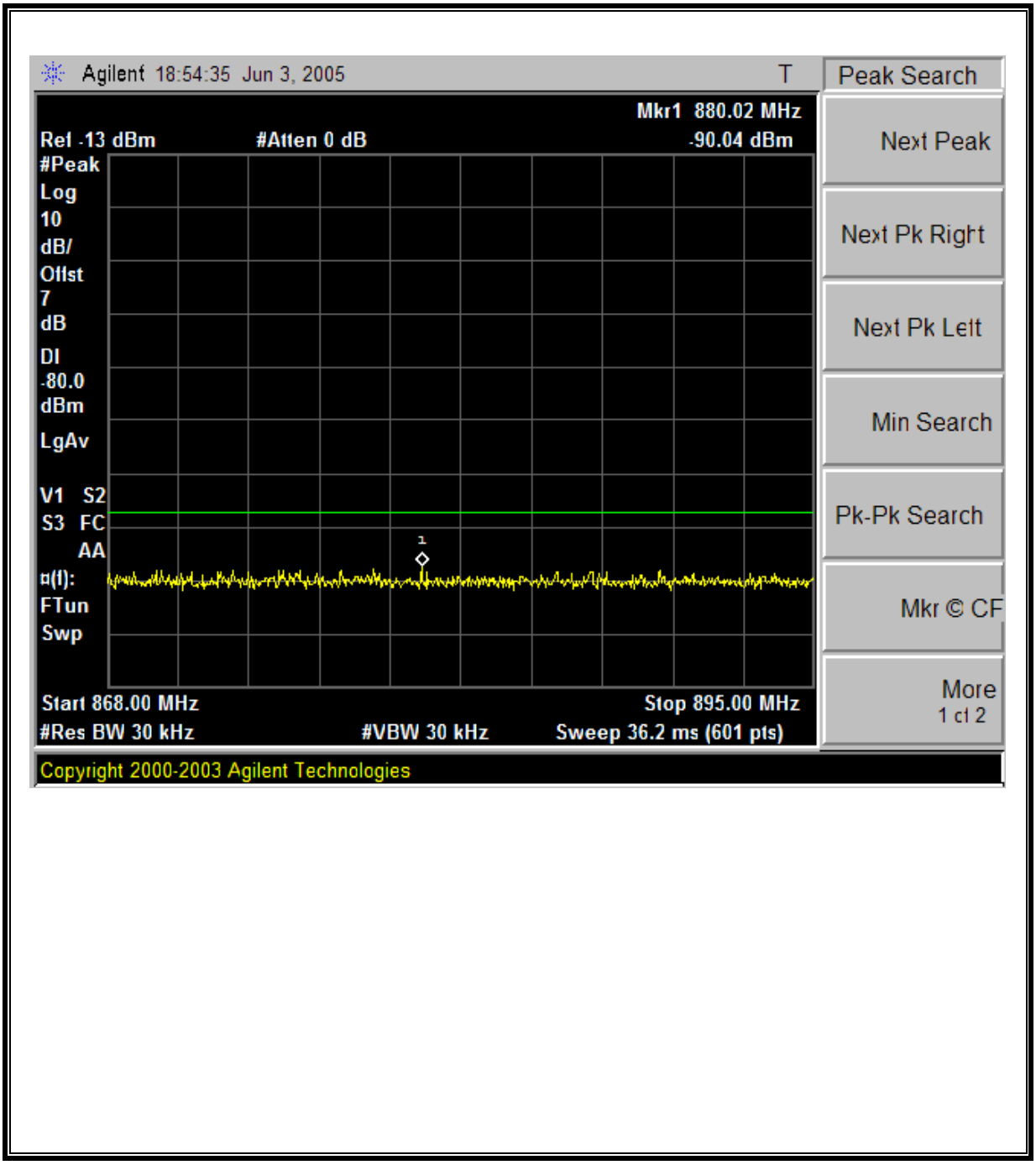
Mobile Emissions in Base Frequency Range



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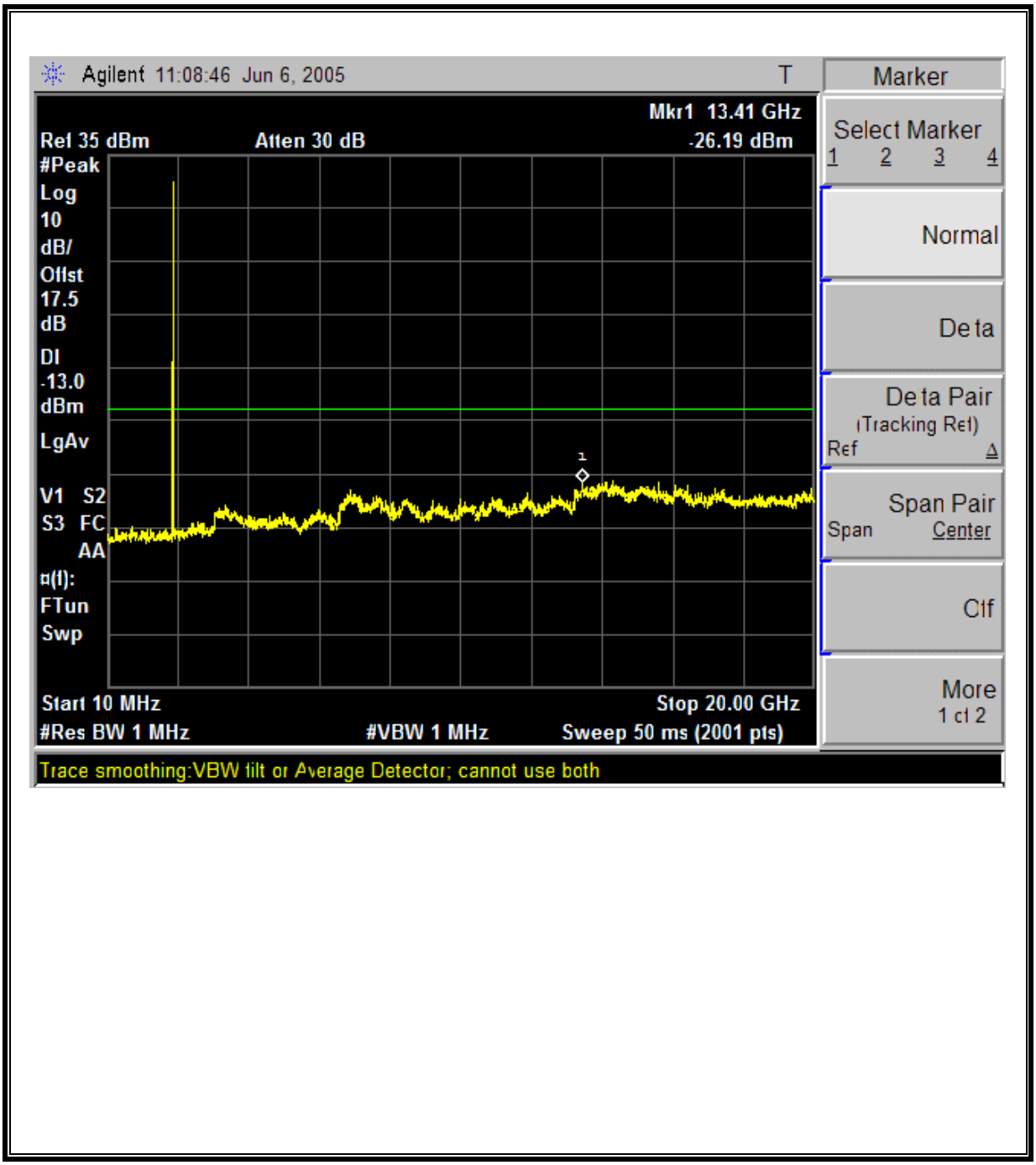
PCS GSM1900 MODULATION RESULTS

Low Channel, Out-Of-Band Emissions



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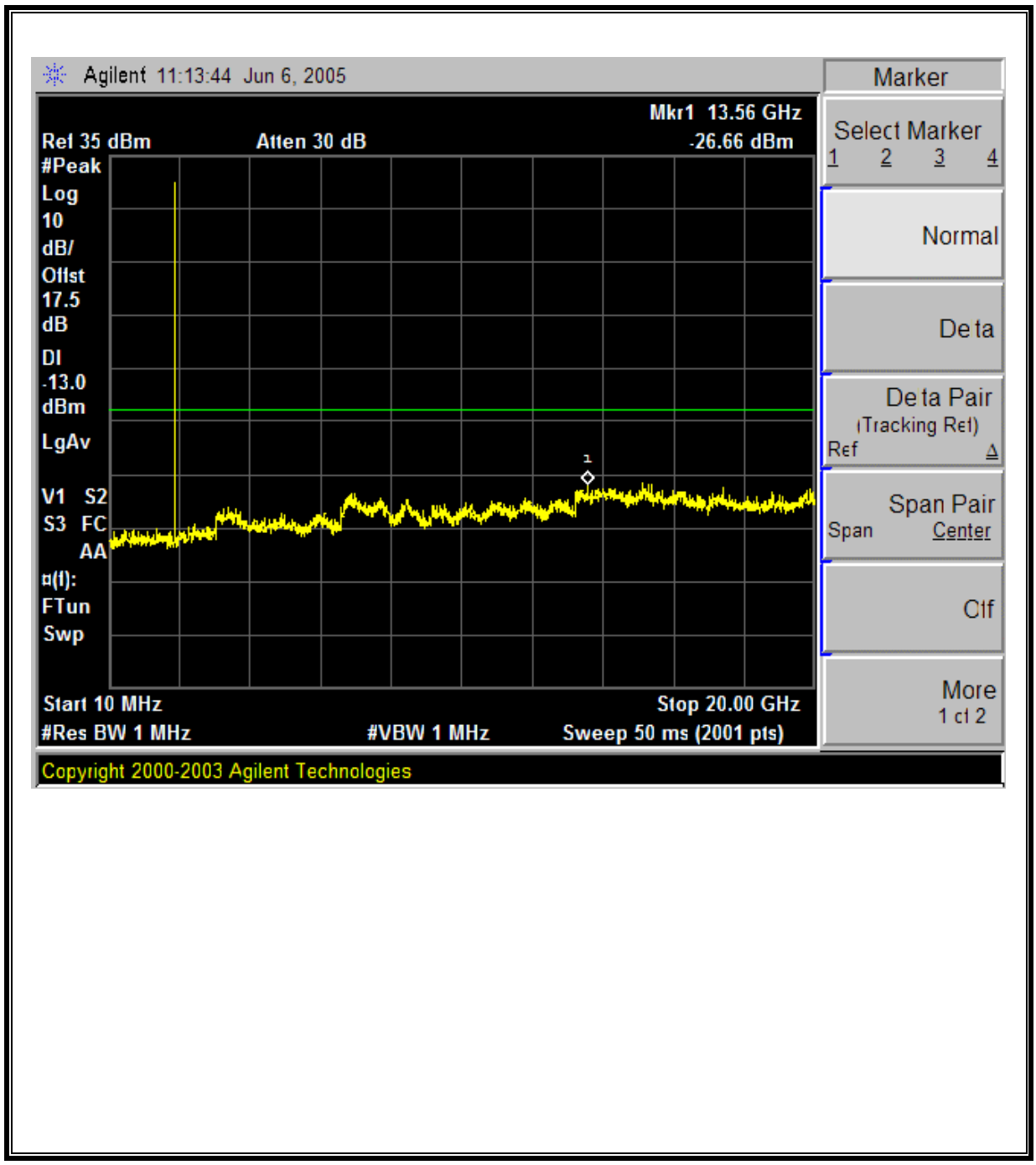
Mid Channel, Out-Of-Band Emissions



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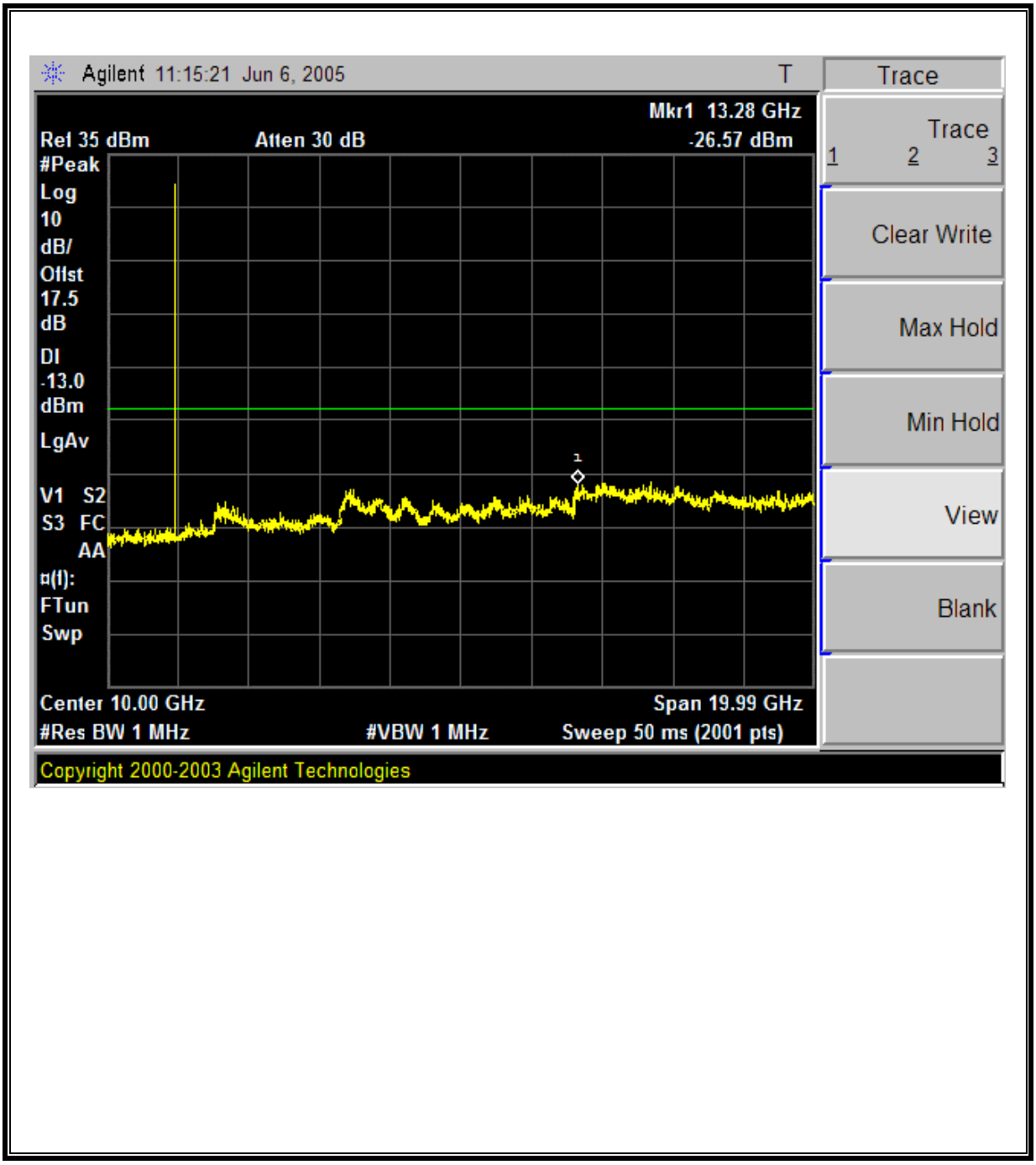
High Channel, Out-Of-Band Emissions



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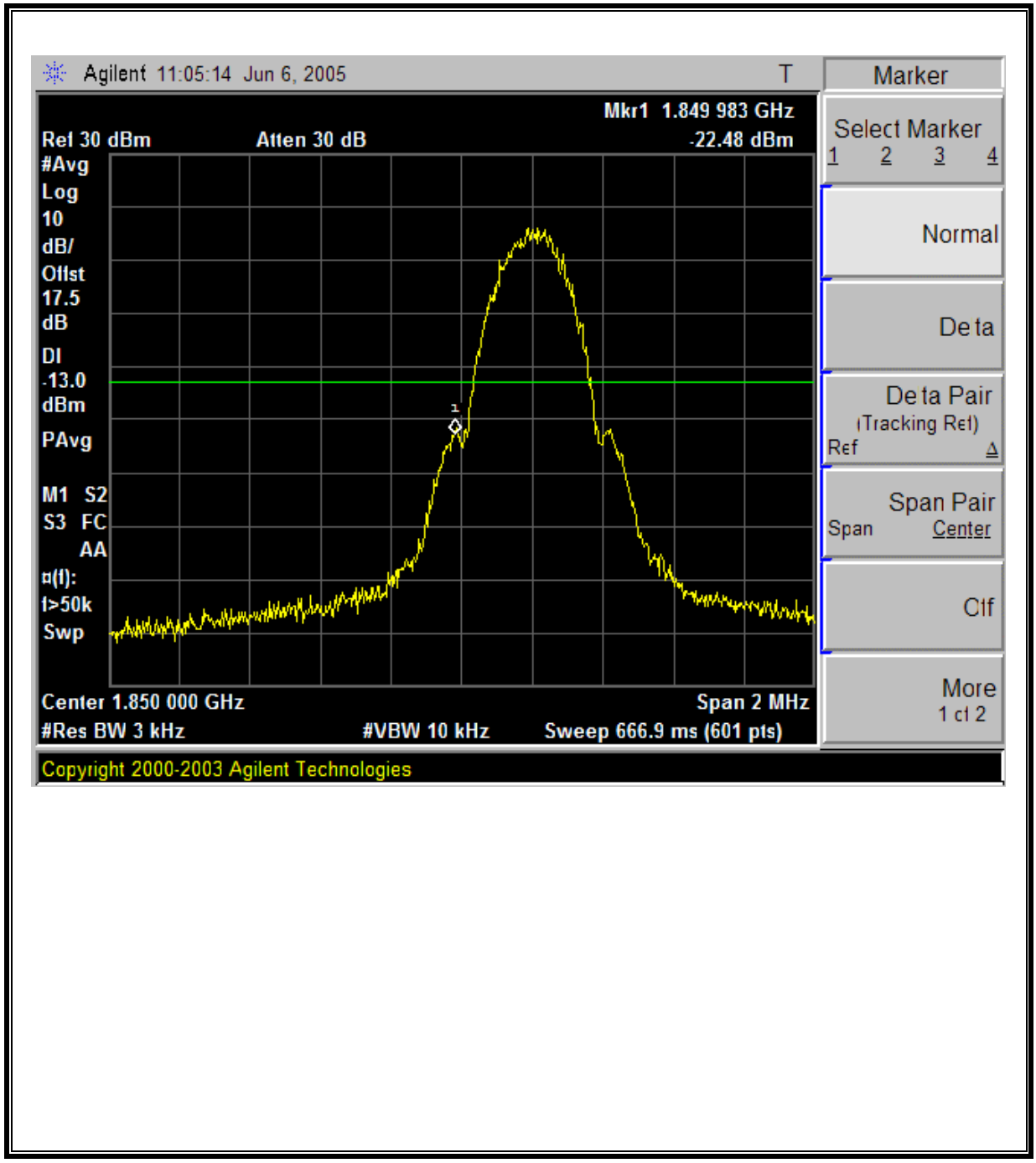
Low Channel Band Edge



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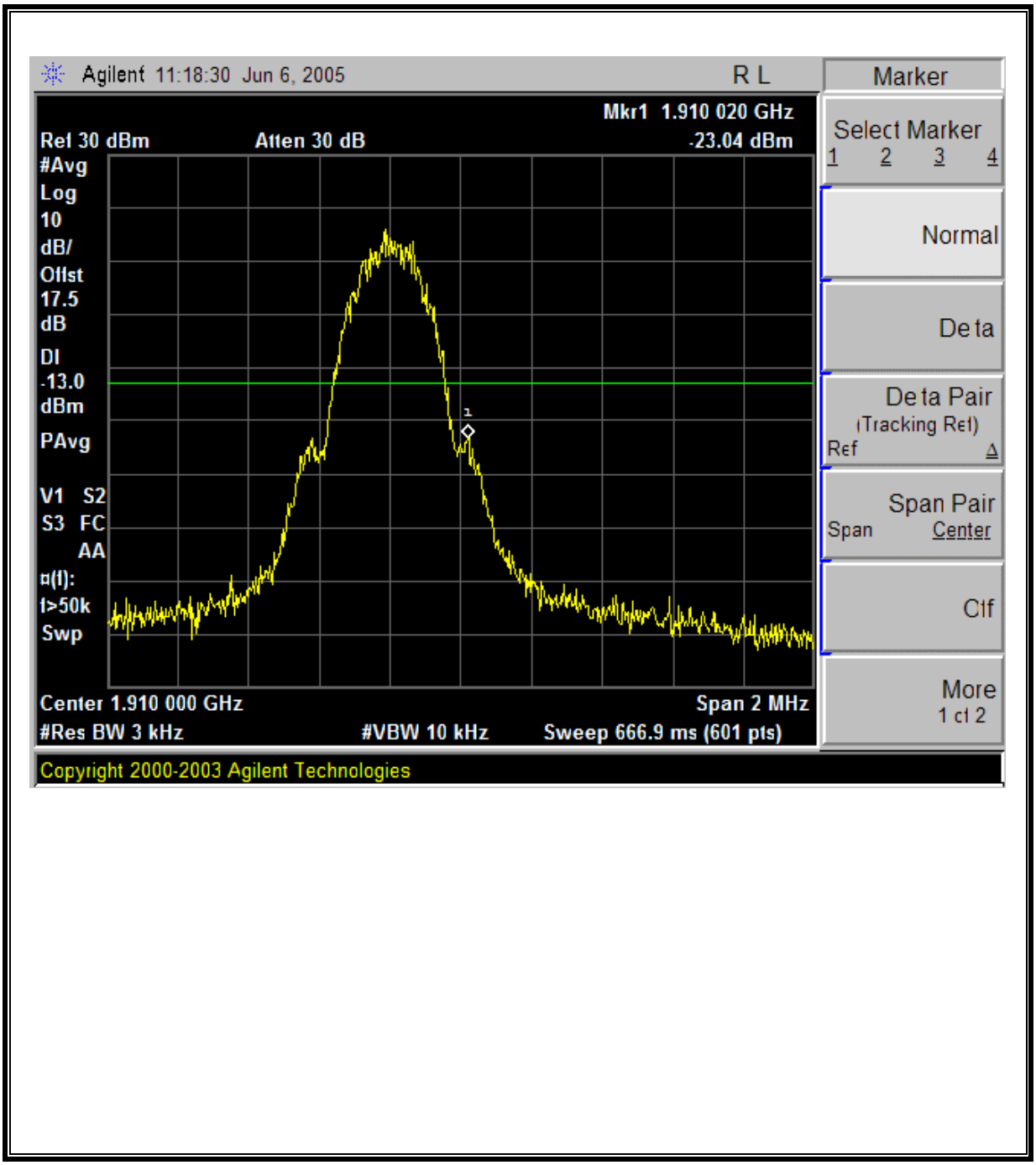
High Channel Band Edge



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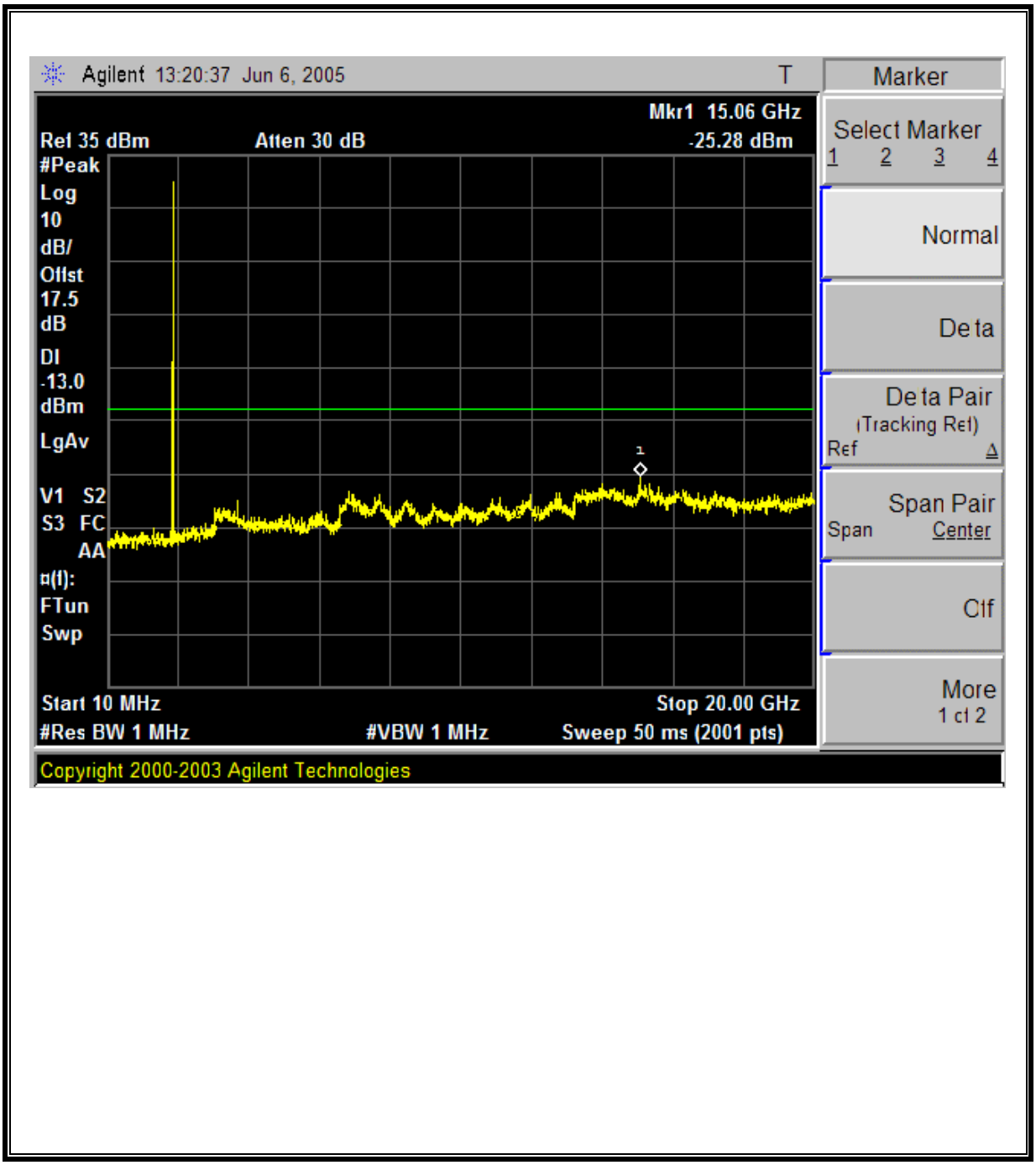
PCS GPRS1900 MODULATION RESULTS

Low Channel, Out-Of-Band Emissions



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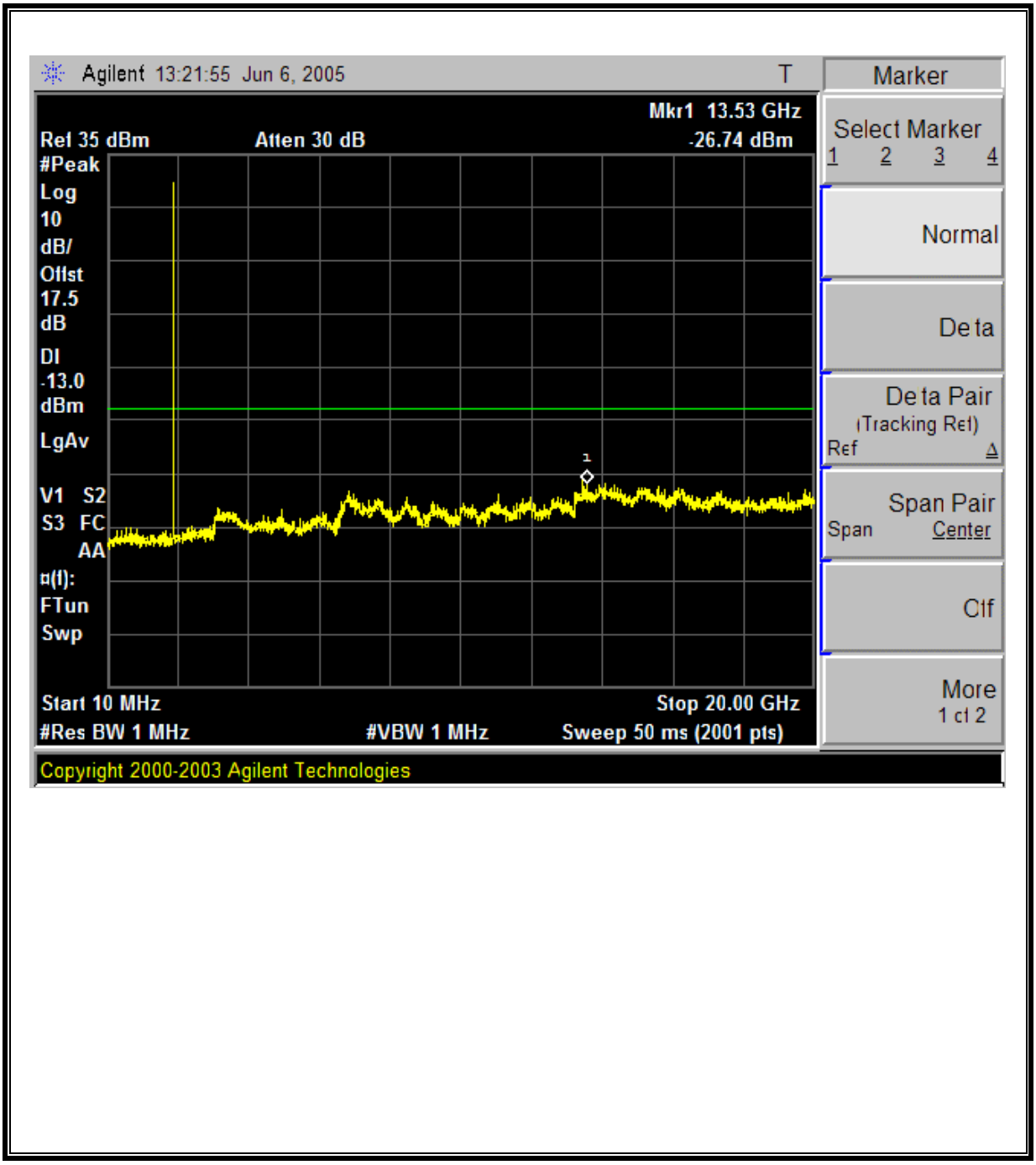
Mid Channel, Out-Of-Band Emissions



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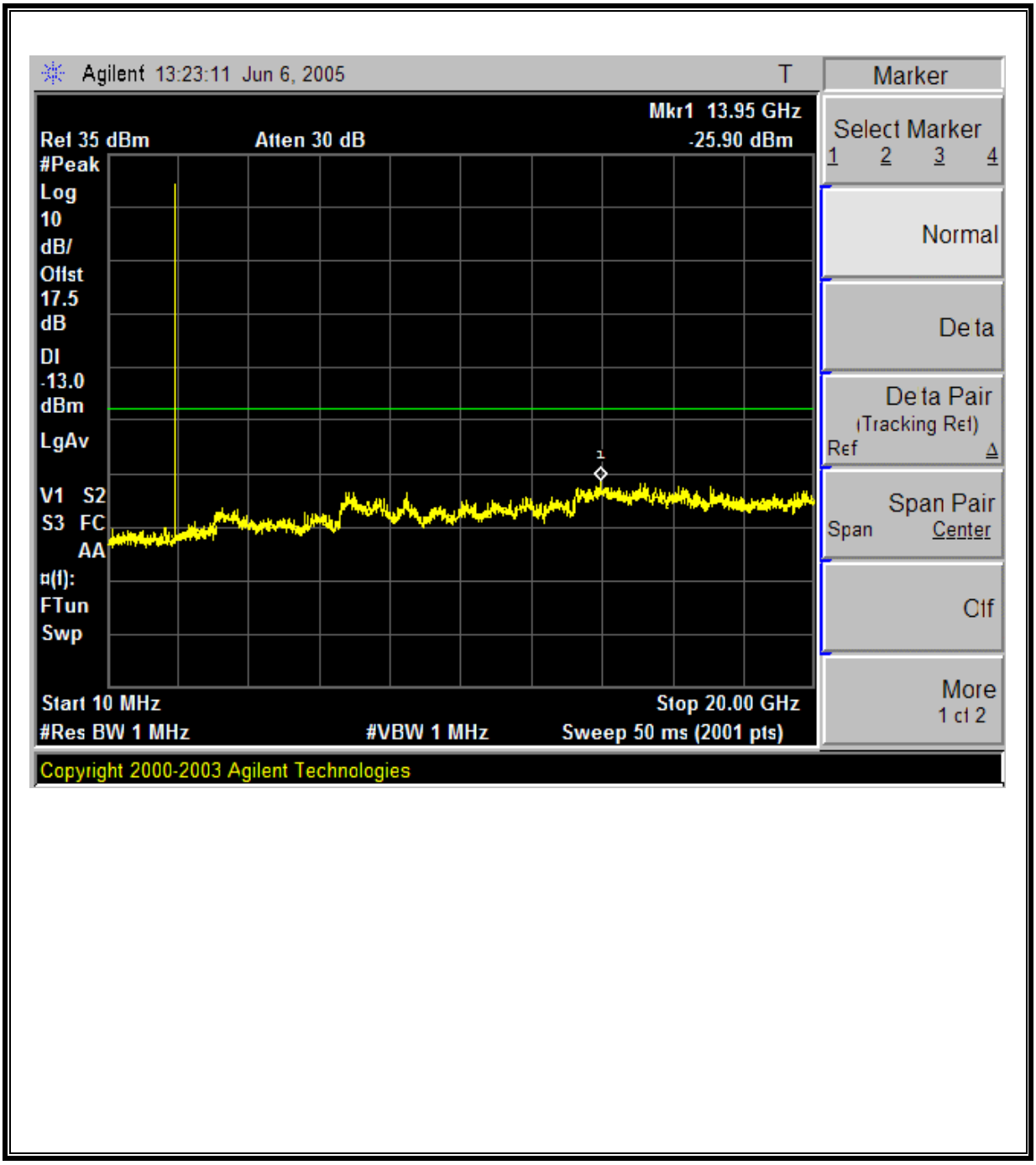
High Channel, Out-Of-Band Emissions



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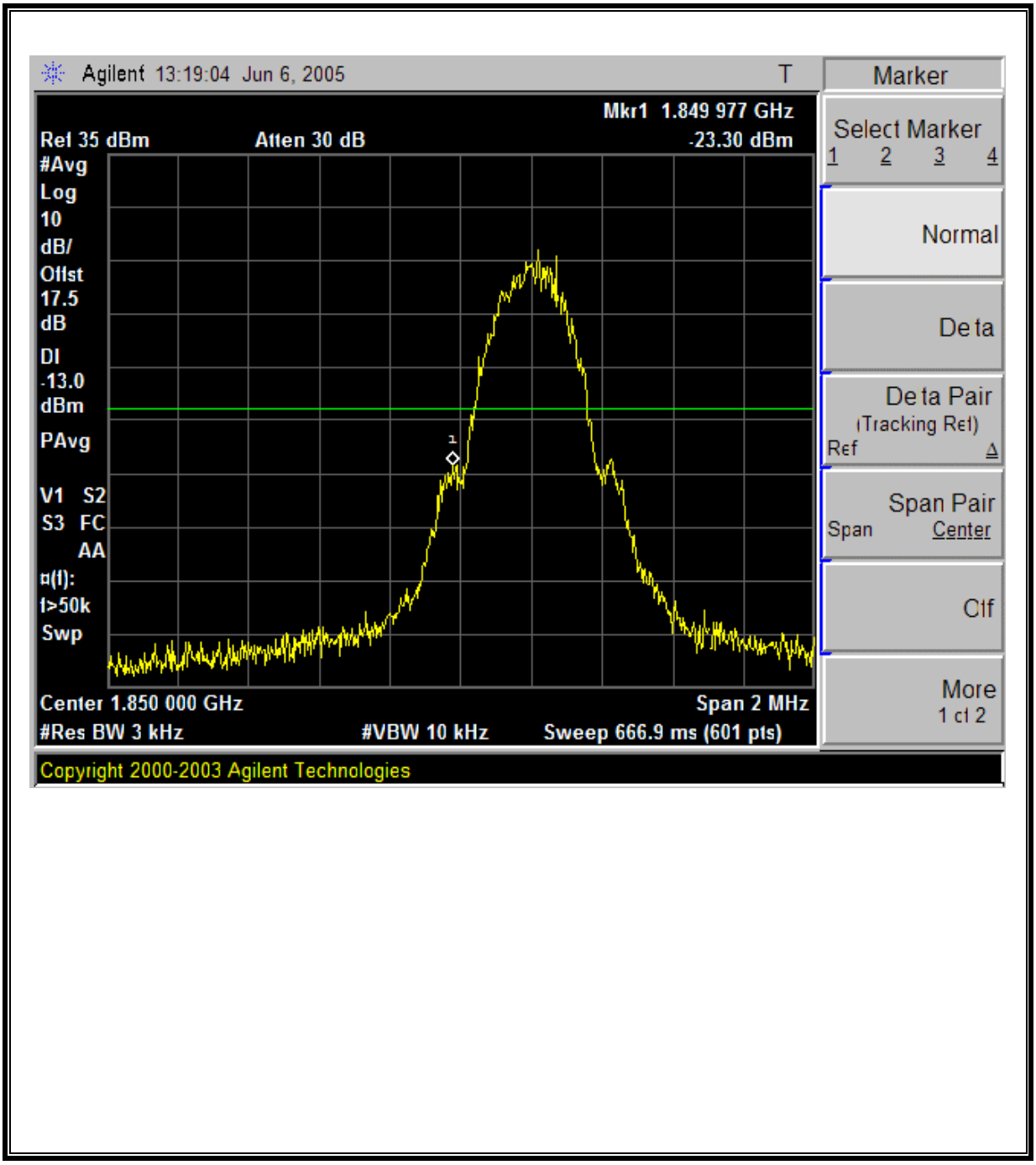
Low Channel Band Edge



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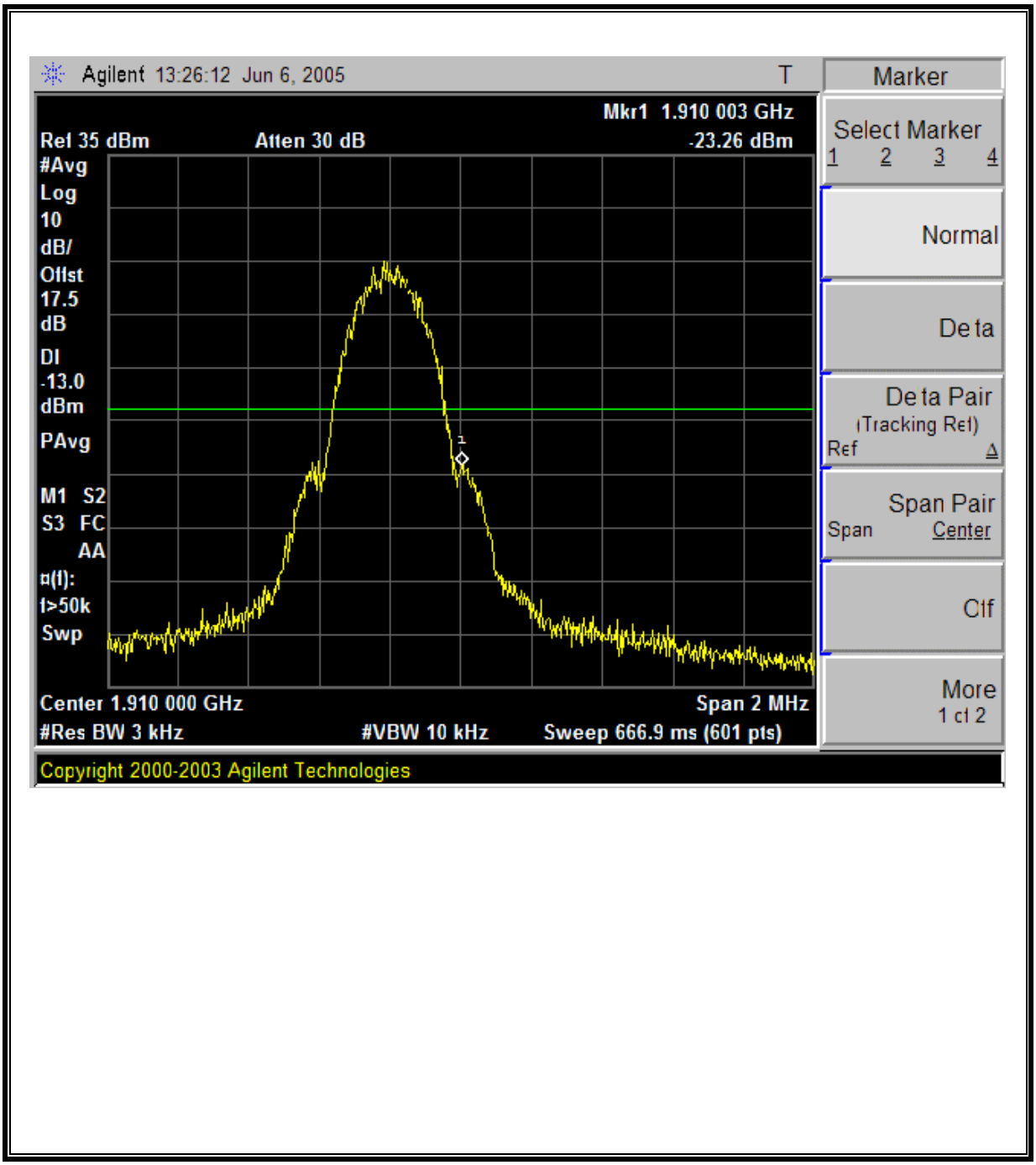
High Channel Band Edge



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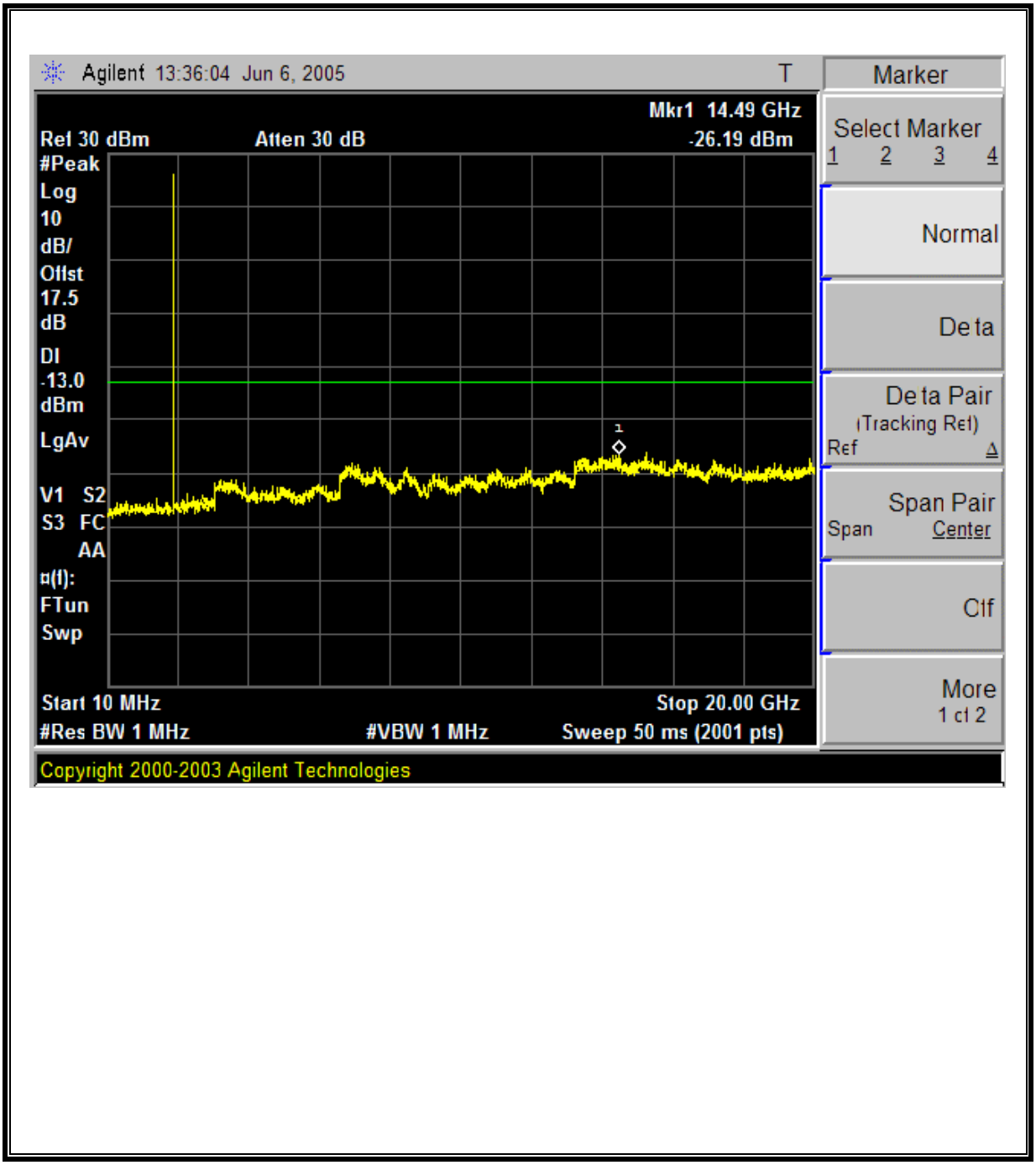
PCS EGPRS1900 MODULATION RESULTS

Low Channel, Out-Of-Band Emissions



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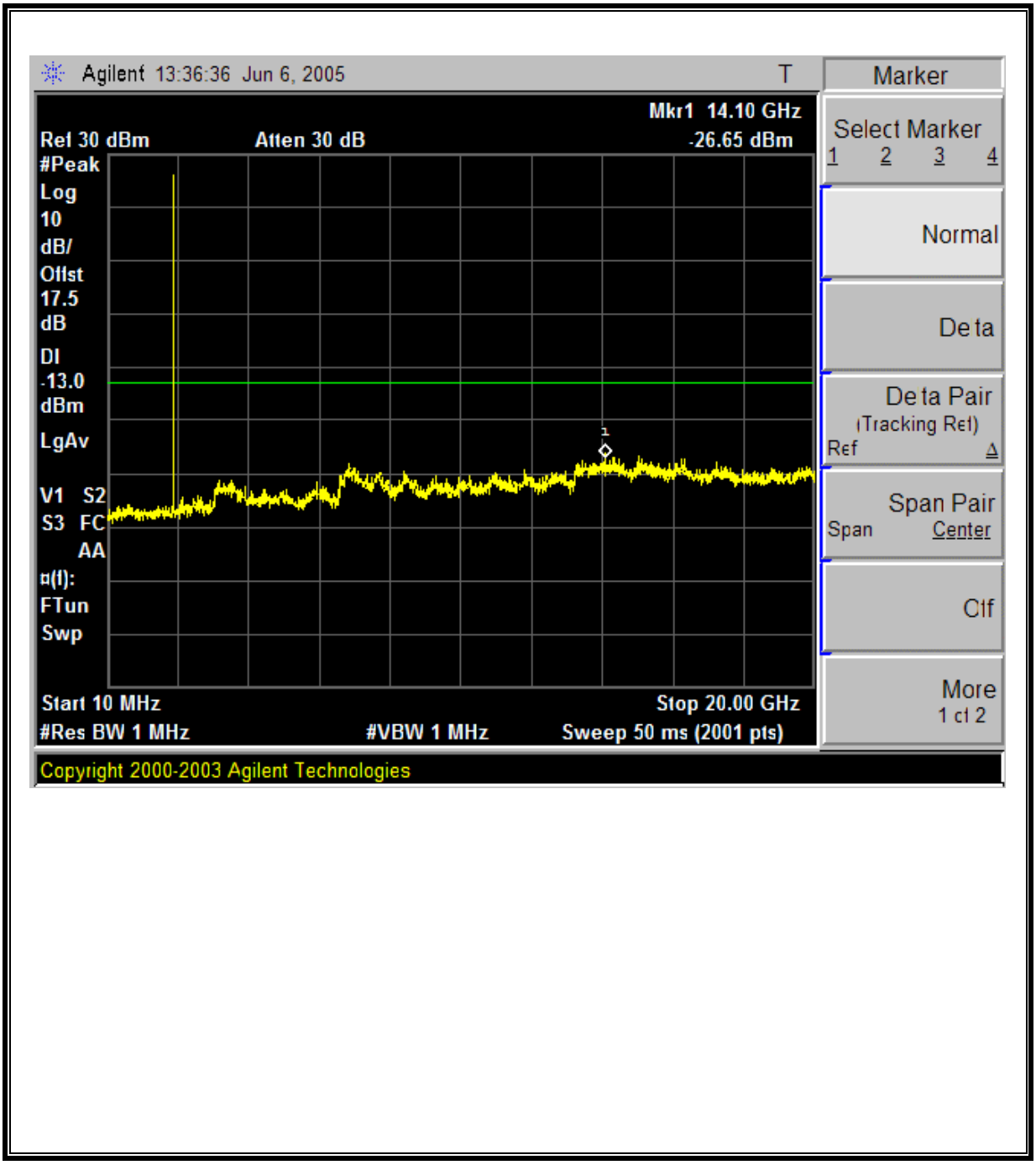
Mid Channel, Out-Of-Band Emissions



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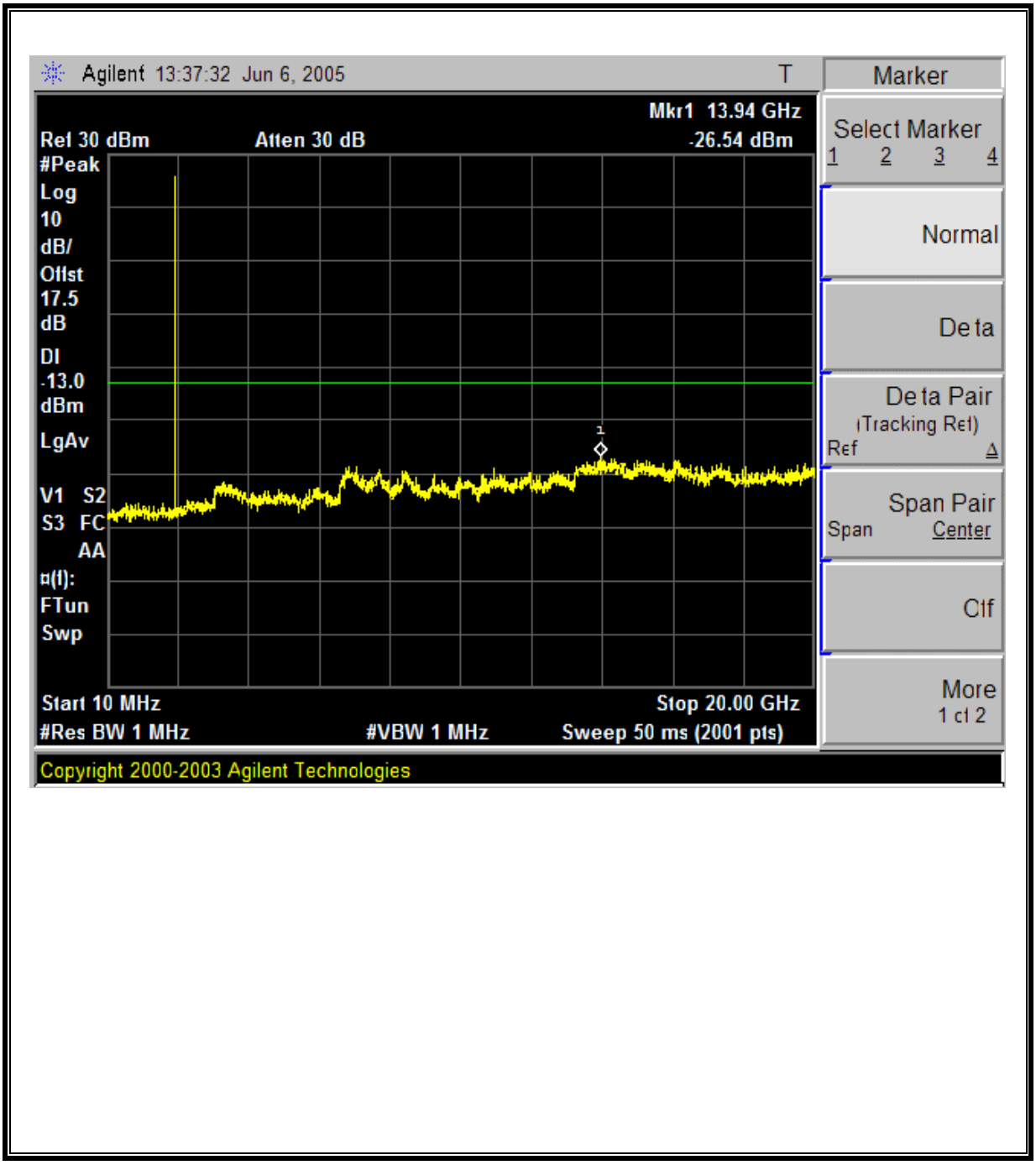
High Channel, Out-Of-Band Emissions



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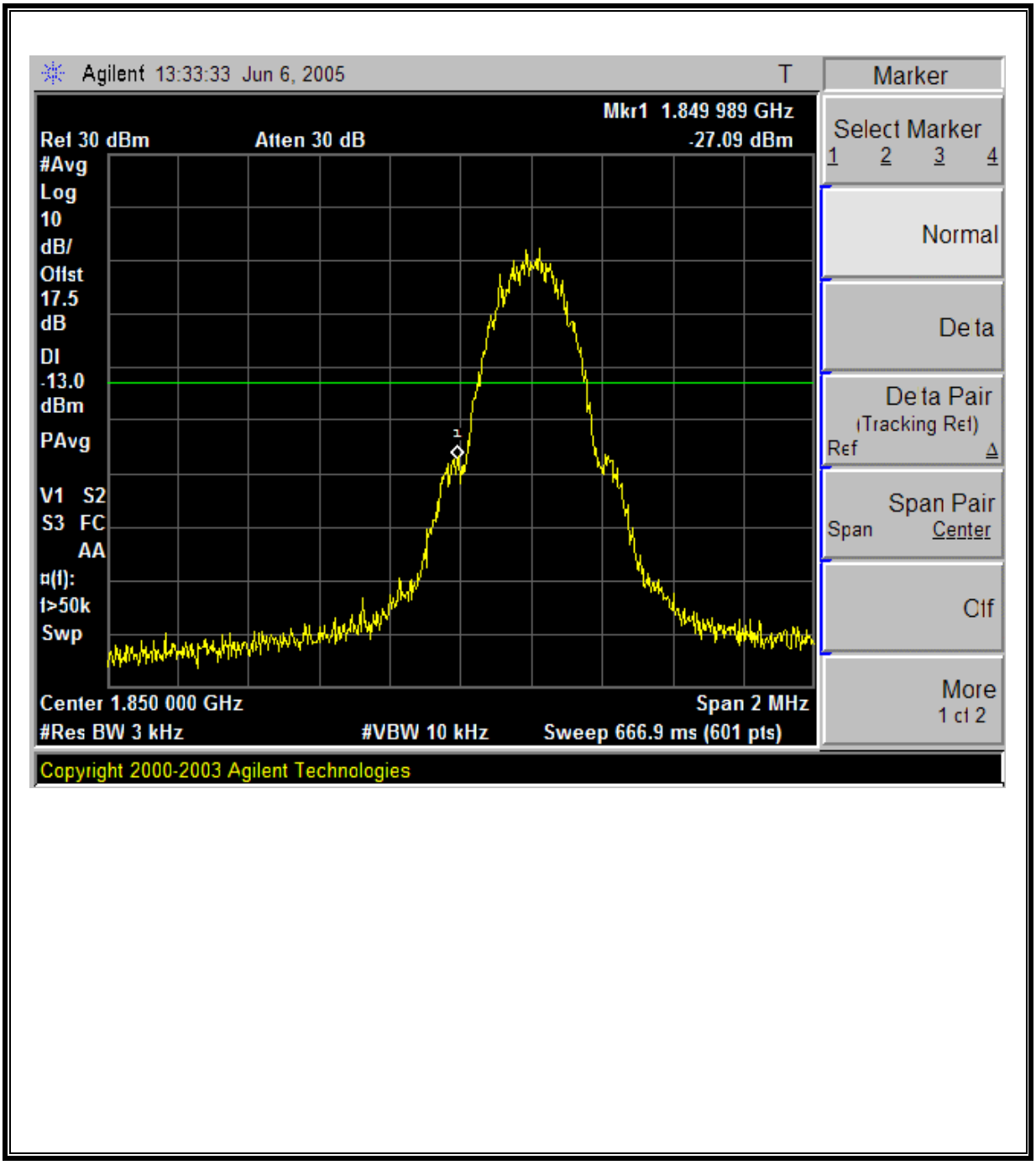
Low Channel Band Edge



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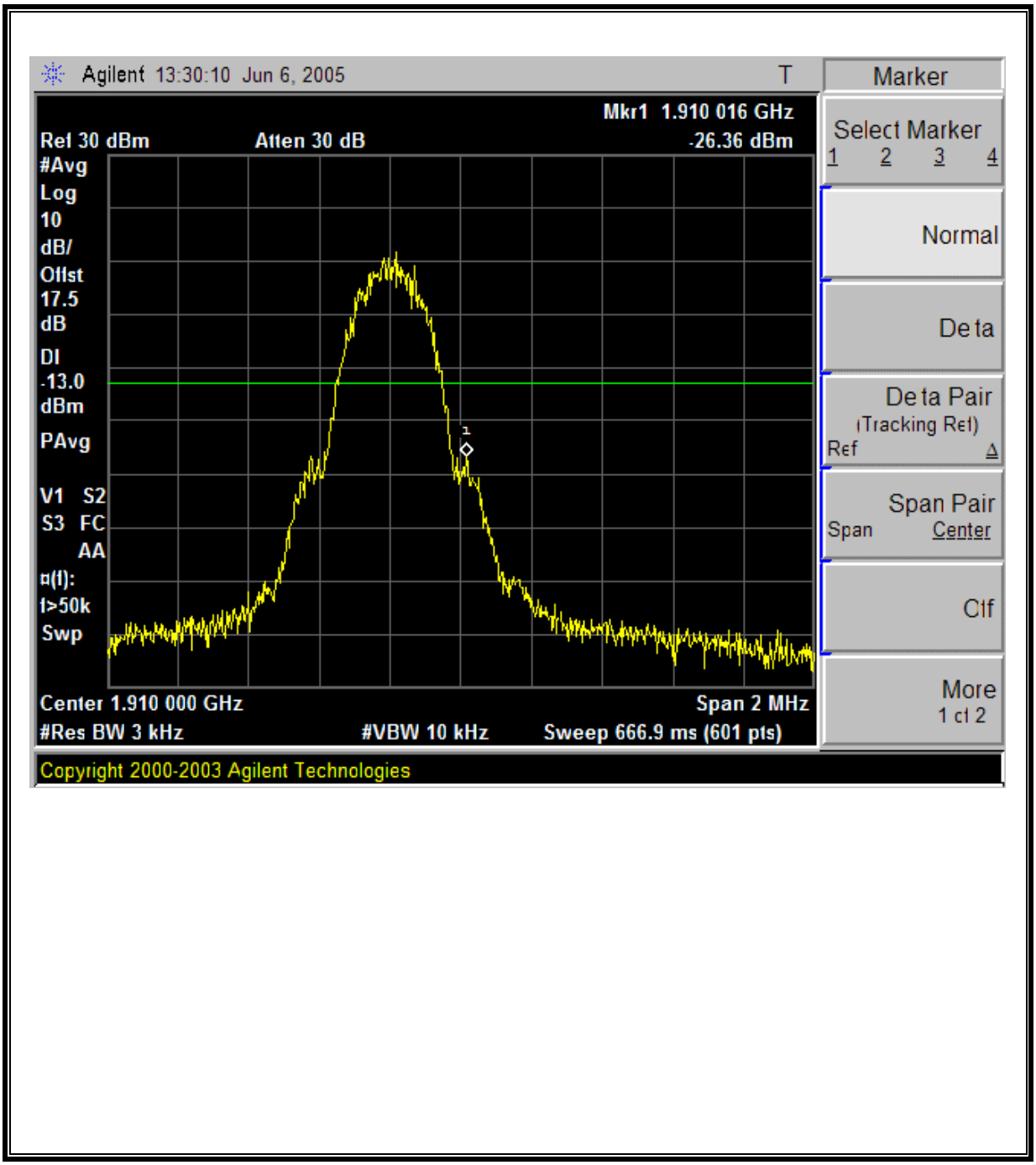
High Channel Band Edge



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8.4. FIELD STRENGTH OF SPURIOUS RADIATION

LIMIT

22.917 (a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

§24.238 (a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

TEST PROCEDURE

ANSI / TIA / EIA 603 Clause 3.2.12 & FCC 22.917 (b)
ANSI / TIA / EIA 603 Clause 3.2.12 & FCC 24.238 (b)

RESULTS

No non-compliance noted.

Note: No emissions were found from 30MHz to 1GHz.

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WIZA 100 MODEL:

GSM850 Spurious & Harmonic (ERP):

06/08/05 **High Frequency Substitution Measurement**
Compliance Certification Services, Morgan Hill 5m Chamber Site
Test Engr:Chin Pang
Project #:05T3452-1
Company:High Tech Computer
EUT Descrip.:PDA Phone
EUT M/N:WIZA100
Test Target:Part 22
Mode Oper:GSM850

Test Equipment:

EMCO Horn 1-18GHz: T120; S/N: 29310 @3m
Horn > 18GHz:
Limit: FCC 22
☑ High Pass Filter
Hi Frequency Cables: ☐ (2 ft) ☑ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T34 HP 8449B
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
GSM850										
Low Ch										
1.648	56.6	V	-45.0	1.6	4.3	2.2	-44.4	-13.0	-31.4	
2.472	56.3	V	-41.2	1.9	6.0	3.9	-39.2	-13.0	-26.2	
3.296	49.2	V	-46.4	2.3	7.8	5.7	-42.9	-13.0	-29.9	
4.121	52.8	V	-41.1	2.6	9.3	7.1	-36.6	-13.0	-23.6	
4.945	57.8	V	-35.1	3.0	10.5	8.3	-29.8	-13.0	-16.8	
1.648	56.6	H	-44.3	1.6	4.3	2.2	-43.7	-13.0	-30.7	
2.472	52.8	H	-44.5	1.9	6.0	3.9	-42.5	-13.0	-29.5	
3.296	50.4	H	-45.1	2.3	7.8	5.7	-41.6	-13.0	-28.6	
4.121	54.7	H	-38.9	2.6	9.3	7.1	-34.4	-13.0	-21.4	
4.945	58.8	H	-33.8	3.0	10.5	8.3	-28.4	-13.0	-15.4	
Mid Ch										
1.672	54.9	V	-46.5	1.6	4.4	2.2	-45.9	-13.0	-32.9	
2.509	52.5	V	-44.9	1.9	6.1	4.0	-42.9	-13.0	-29.9	
3.346	53.7	V	-41.8	2.3	7.9	5.8	-38.3	-13.0	-25.3	
4.182	55.2	V	-38.7	2.6	9.4	7.2	-34.1	-13.0	-21.1	
5.020	57.8	V	-33.8	3.0	10.6	8.4	-28.3	-13.0	-15.3	
1.672	54.5	H	-46.2	1.6	4.4	2.2	-45.6	-13.0	-32.6	
2.509	52.0	H	-45.2	1.9	6.1	4.0	-43.2	-13.0	-30.2	
3.346	54.8	H	-40.6	2.3	7.9	5.8	-37.1	-13.0	-24.1	
4.182	52.0	H	-41.5	2.6	9.4	7.2	-37.0	-13.0	-24.0	
5.020	54.3	H	-36.3	3.0	10.6	8.4	-30.8	-13.0	-17.8	
High Ch										
1.697	52.5	V	-48.8	1.6	4.4	2.2	-48.1	-13.0	-35.1	
2.546	50.9	V	-46.4	2.0	6.2	4.1	-44.3	-13.0	-31.3	
3.395	48.2	V	-47.2	2.3	8.0	5.9	-43.6	-13.0	-30.6	
4.244	56.2	V	-37.6	2.7	9.5	7.3	-33.0	-13.0	-20.0	
5.093	54.0	V	-37.4	3.0	10.5	8.4	-32.0	-13.0	-19.0	
1.697	53.6	H	-47.0	1.6	4.4	2.2	-46.3	-13.0	-33.3	
2.546	50.0	H	-47.1	2.0	6.2	4.1	-45.0	-13.0	-32.0	
3.395	51.8	H	-43.5	2.3	8.0	5.9	-39.9	-13.0	-26.9	
4.244	48.6	H	-44.9	2.7	9.5	7.3	-40.2	-13.0	-27.2	
5.093	53.9	H	-36.5	3.0	10.5	8.4	-31.1	-13.0	-18.1	

Note: No other emissions were detected above the system noise floor

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GPRS850 Spurious & Harmonic (ERP):

06/08/05 **High Frequency Substitution Measurement**
Compliance Certification Services, Morgan Hill 5m Chamber Site
Test Engr:Chin Pang
Project #:05T3452-1
Company:High Tech Computer
EUT Descrip.:PDA Phone
EUT M/N:WIZA100
Test Target:Part 22
Mode Oper:GPRS850
Test Equipment:

EMCO Horn 1-18GHz: T120; S/N: 29310 @3m
Horn > 18GHz:
Limit: FCC 22
☑ High Pass Filter
Hi Frequency Cables: ☐ (2 ft) ☑ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T34 HP 8449B
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
GPRS850										
Low Ch										
1.648	54.4	V	-47.2	1.6	4.3	2.2	-46.6	-13.0	-33.6	
2.472	50.5	V	-47.0	1.9	6.0	3.9	-45.0	-13.0	-32.0	
3.296	49.2	V	-46.4	2.3	7.8	5.7	-42.9	-13.0	-29.9	
4.121	48.3	V	-45.6	2.6	9.3	7.1	-41.1	-13.0	-28.1	
4.945	55.6	V	-37.3	3.0	10.5	8.3	-32.0	-13.0	-19.0	
1.648	56.0	H	-44.9	1.6	4.3	2.2	-44.3	-13.0	-31.3	
2.472	51.7	H	-45.6	1.9	6.0	3.9	-43.6	-13.0	-30.6	
3.296	49.0	H	-46.5	2.3	7.8	5.7	-43.0	-13.0	-30.0	
4.182	53.3	H	-40.2	2.6	9.4	7.2	-35.7	-13.0	-22.7	
4.945	58.4	H	-34.2	3.0	10.5	8.3	-28.8	-13.0	-15.8	
Mid Ch										
1.672	54.2	V	-47.2	1.6	4.4	2.2	-46.6	-13.0	-33.6	
2.509	50.7	V	-46.7	1.9	6.1	4.0	-44.7	-13.0	-31.7	
3.346	48.5	V	-47.0	2.3	7.9	5.8	-43.5	-13.0	-30.5	
4.182	48.0	V	-45.9	2.6	9.4	7.2	-41.3	-13.0	-28.3	
5.020	57.9	V	-33.7	3.0	10.6	8.4	-28.2	-13.0	-15.2	
1.672	56.0	H	-44.7	1.6	4.4	2.2	-44.1	-13.0	-31.1	
2.509	52.1	H	-45.1	1.9	6.1	4.0	-43.1	-13.0	-30.1	
3.346	50.0	H	-45.4	2.3	7.9	5.8	-41.9	-13.0	-28.9	
4.182	48.0	H	-45.5	2.6	9.4	7.2	-41.0	-13.0	-28.0	
5.020	55.7	H	-34.9	3.0	10.6	8.4	-29.4	-13.0	-16.4	
High Ch										
1.697	53.8	V	-47.5	1.6	4.4	2.2	-46.8	-13.0	-33.8	
2.546	50.0	V	-47.3	2.0	6.2	4.1	-45.2	-13.0	-32.2	
3.395	48.0	V	-47.4	2.3	8.0	5.9	-43.8	-13.0	-30.8	
4.244	48.7	V	-45.1	2.7	9.5	7.3	-40.5	-13.0	-27.5	
5.093	53.5	V	-37.9	3.0	10.5	8.4	-32.5	-13.0	-19.5	
1.697	52.6	H	-48.0	1.6	4.4	2.2	-47.3	-13.0	-34.3	
2.546	50.6	H	-46.5	2.0	6.2	4.1	-44.4	-13.0	-31.4	
3.395	49.3	H	-46.0	2.3	8.0	5.9	-42.4	-13.0	-29.4	
4.244	50.5	H	-43.0	2.7	9.5	7.3	-38.3	-13.0	-25.3	
5.093	54.0	H	-36.4	3.0	10.5	8.4	-31.0	-13.0	-18.0	

Note: No other emissions were detected above the system noise floor.

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EGPRS850 Spurious & Harmonic (ERP):

06/08/05 **High Frequency Substitution Measurement**
Compliance Certification Services, Morgan Hill 5m Chamber Site
Test Engr:Chin Pang
Project #:05T3452-1
Company:High Tech Computer
EUT Descrip.:PDA Phone
EUT M/N:WIZA100
Test Target:Part 22
Mode Oper:EGPRS850

Test Equipment:

EMCO Horn 1-18GHz: T120; S/N: 29310 @3m
Horn > 18GHz:
Limit: FCC 22
☑ High Pass Filter
Hi Frequency Cables: ☐ (2 ft) ☑ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T34 HP 8449B
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
EGPRS850										
Low Ch										
1.648	53.2	V	-48.4	1.6	4.3	2.2	-47.8	-13.0	-34.8	
2.472	50.5	V	-47.0	1.9	6.0	3.9	-45.0	-13.0	-32.0	
3.296	49.4	V	-46.2	2.3	7.8	5.7	-42.7	-13.0	-29.7	
4.121	47.0	V	-46.9	2.6	9.3	7.1	-42.4	-13.0	-29.4	
1.648	54.7	V	-46.9	1.6	4.3	2.2	-46.3	-13.0	-33.3	
2.472	51.0	V	-46.5	1.9	6.0	3.9	-44.5	-13.0	-31.5	
3.296	49.2	V	-46.4	2.3	7.8	5.7	-42.9	-13.0	-29.9	
4.121	47.0	V	-46.9	2.6	9.3	7.1	-42.4	-13.0	-29.4	
Mid Ch										
1.672	52.3	V	-49.1	1.6	4.4	2.2	-48.5	-13.0	-35.5	
2.509	49.4	V	-48.0	1.9	6.1	4.0	-46.0	-13.0	-33.0	
3.346	47.8	V	-47.7	2.3	7.9	5.8	-44.2	-13.0	-31.2	
4.182	47.5	V	-46.4	2.6	9.4	7.2	-41.8	-13.0	-28.8	
1.672	53.3	H	-47.4	1.6	4.4	2.2	-46.8	-13.0	-33.8	
2.509	50.7	H	-46.5	1.9	6.1	4.0	-44.5	-13.0	-31.5	
3.346	48.8	H	-46.6	2.3	7.9	5.8	-43.1	-13.0	-30.1	
4.182	47.7	H	-45.8	2.6	9.4	7.2	-41.3	-13.0	-28.3	
High Ch										
1.697	51.5	V	-49.8	1.6	4.4	2.2	-49.1	-13.0	-36.1	
2.546	50.0	V	-47.3	2.0	6.2	4.1	-45.2	-13.0	-32.2	
3.395	48.5	V	-46.9	2.3	8.0	5.9	-43.3	-13.0	-30.3	
4.244	47.2	V	-46.6	2.7	9.5	7.3	-42.0	-13.0	-29.0	
1.697	52.0	H	-48.6	1.6	4.4	2.2	-47.9	-13.0	-34.9	
2.546	49.6	H	-47.5	2.0	6.2	4.1	-45.4	-13.0	-32.4	
3.395	48.8	H	-46.5	2.3	8.0	5.9	-42.9	-13.0	-29.9	
4.244	47.0	H	-46.5	2.7	9.5	7.3	-41.8	-13.0	-28.8	

Note: No other emissions were detected above the system noise floor

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WIZA 110 MODEL (WORST CASE MODULATION)

GSM850 Spurious & Harmonic (ERP):

06/08/05 **High Frequency Substitution Measurement**
Compliance Certification Services, Morgan Hill 5m Chamber Site
Test Engr:Chin Pang
Project #:05T3452-1
Company:High Tech Computer
EUT Descrip.:PDA Phone
EUT M/N:WIZA110
Test Target:Part 22
Mode Oper:GSM850

Test Equipment:

EMCO Horn 1-18GHz: T120; S/N: 29310 @3m
Horn > 18GHz:
Limit: FCC 22
☑ High Pass Filter
Hi Frequency Cables: ☐ (2 ft) ☑ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T34 HP 8449B
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
GSM850										
Low Ch										
2.472	57.3	V	-40.2	1.9	6.0	3.9	-38.2	-13.0	-25.2	
4.121	53.0	V	-40.9	2.6	9.3	7.1	-36.4	-13.0	-23.4	
4.945	60.0	V	-32.9	3.0	10.5	8.3	-27.6	-13.0	-14.6	
2.472	51.8	H	-45.5	1.9	6.0	3.9	-43.5	-13.0	-30.5	
4.121	53.8	H	-39.8	2.6	9.3	7.1	-35.3	-13.0	-22.3	
4.945	57.5	H	-35.1	3.0	10.5	8.3	-29.7	-13.0	-16.7	
Mid Ch										
2.509	54.0	V	-43.4	1.9	6.1	4.0	-41.4	-13.0	-28.4	
3.346	52.4	V	-43.1	2.3	7.9	5.8	-39.6	-13.0	-26.6	
4.182	56.0	V	-37.9	2.6	9.4	7.2	-33.3	-13.0	-20.3	
5.020	60.6	V	-31.0	3.0	10.6	8.4	-25.5	-13.0	-12.5	
3.346	55.0	H	-40.4	2.3	7.9	5.8	-36.9	-13.0	-23.9	
4.182	50.8	H	-42.7	2.6	9.4	7.2	-38.2	-13.0	-25.2	
5.020	57.4	H	-33.2	3.0	10.6	8.4	-27.7	-13.0	-14.7	
High Ch										
3.395	50.0	V	-45.4	2.3	8.0	5.9	-41.8	-13.0	-28.8	
4.244	55.7	V	-38.1	2.7	9.5	7.3	-33.5	-13.0	-20.5	
5.093	58.0	V	-33.4	3.0	10.5	8.4	-28.0	-13.0	-15.0	
3.395	50.2	H	-45.1	2.3	8.0	5.9	-41.5	-13.0	-28.5	
4.244	47.2	H	-46.3	2.7	9.5	7.3	-41.6	-13.0	-28.6	
5.093	52.9	H	-37.5	3.0	10.5	8.4	-32.1	-13.0	-19.1	

Note: No other emissions were detected above the system noise floor

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WIZA 200 MODEL (WORST CASE MODULATION)

GSM850 Spurious & Harmonic (ERP):

06/08/05 **High Frequency Substitution Measurement**
Compliance Certification Services, Morgan Hill 5m Chamber Site
Test Engr:Chin Pang
Project #:05T3452-1
Company:High Tech Computer
EUT Descrip.:PDA Phone
EUT M/N:WIZA200
Test Target:Part 22
Mode Oper:GSM850

Test Equipment:

EMCO Horn 1-18GHz: T120; S/N: 29310 @3m
Horn > 18GHz:
Limit: FCC 22
☑ High Pass Filter
Hi Frequency Cables: ☐ (2 ft) ☑ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T34 HP 8449B
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
GSM850										
Low Ch										
3.296	50.0	V	-45.6	2.3	7.8	5.7	-42.1	-13.0	-29.1	
4.121	52.8	V	-41.1	2.6	9.3	7.1	-36.6	-13.0	-23.6	
4.945	58.3	V	-34.6	3.0	10.5	8.3	-29.3	-13.0	-16.3	
3.296	50.4	H	-45.1	2.3	7.8	5.7	-41.6	-13.0	-28.6	
4.121	55.0	H	-38.6	2.6	9.3	7.1	-34.1	-13.0	-21.1	
4.945	56.8	H	-35.8	3.0	10.5	8.3	-30.4	-13.0	-17.4	
Mid Ch										
3.346	55.4	V	-40.1	2.3	7.9	5.8	-36.6	-13.0	-23.6	
4.182	53.9	V	-40.0	2.6	9.4	7.2	-35.4	-13.0	-22.4	
5.020	56.8	V	-34.8	3.0	10.6	8.4	-29.3	-13.0	-16.3	
3.346	56.5	H	-38.9	2.3	7.9	5.8	-35.4	-13.0	-22.4	
4.182	53.0	H	-40.5	2.6	9.4	7.2	-36.0	-13.0	-23.0	
5.020	60.0	H	-30.6	3.0	10.6	8.4	-25.1	-13.0	-12.1	
High Ch										
3.395	50.4	V	-45.0	2.3	8.0	5.9	-41.4	-13.0	-28.4	
4.244	52.6	V	-41.2	2.7	9.5	7.3	-36.6	-13.0	-23.6	
5.093	53.2	V	-38.2	3.0	10.5	8.4	-32.8	-13.0	-19.8	
1.697	53.6	H	-47.0	1.6	4.4	2.2	-46.3	-13.0	-33.3	
3.395	52.0	H	-43.3	2.3	8.0	5.9	-39.7	-13.0	-26.7	
4.244	50.0	H	-43.5	2.7	9.5	7.3	-38.8	-13.0	-25.8	
5.093	56.7	H	-33.7	3.0	10.5	8.4	-28.3	-13.0	-15.3	

Note: No other emissions were detected above the system noise floor

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WIZA 100 MODEL:

GSM1900 Spurious & Harmonic (EIRP):

06/08/05 **High Frequency Substitution Measurement**
Compliance Certification Services, Morgan Hill 5m Chamber Site

Test Engr:Chin Pang
Project #:05T3452-1
Company:High Tech Computer
EUT Descrip.:PDA Phone
EUT M/N:WIZA100
Test Target:Part 24
Mode Oper: GSM1900, PCS Band

Test Equipment:

EMCO Horn 1-18GHz: T120; S/N: 29310 @3m
Horn > 18GHz:
Limit: FCC 24
☑ High Pass Filter
Hi Frequency Cables: ☐ (2 ft) ☑ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T34 HP 8449B
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
GSM1900										
Low Ch										
3.700	55.2	V	-39.6	2.4	8.6	6.4	-33.4	-13.0	-20.4	
5.550	53.0	V	-37.4	3.2	10.5	8.4	-30.1	-13.0	-17.1	
7.400	56.7	V	-31.9	3.7	12.1	9.9	-23.6	-13.0	-10.6	
9.251	60.5	V	-28.5	4.2	13.3	11.2	-19.4	-13.0	-6.4	
3.700	56.0	H	-38.7	2.4	8.6	6.4	-32.5	-13.0	-19.5	
5.550	52.3	H	-37.1	3.2	10.5	8.4	-29.8	-13.0	-16.8	
7.400	55.0	H	-32.8	3.7	12.1	9.9	-24.5	-13.0	-11.5	
9.251	58.4	H	-30.6	4.2	13.3	11.2	-21.5	-13.0	-8.5	
Mid Ch										
3.760	57.9	V	-36.7	2.5	8.7	6.5	-30.5	-13.0	-17.5	
5.640	52.6	V	-37.7	3.3	10.6	8.4	-30.4	-13.0	-17.4	
7.520	50.6	V	-37.9	3.7	12.2	10.0	-29.5	-13.0	-16.5	
9.400	59.2	V	-29.7	4.2	13.3	11.2	-20.6	-13.0	-7.6	
3.760	55.2	H	-39.3	2.5	8.7	6.5	-33.1	-13.0	-20.1	
5.640	50.5	H	-38.8	3.3	10.6	8.4	-31.5	-13.0	-18.5	
7.520	53.7	H	-34.0	3.7	12.2	10.0	-25.6	-13.0	-12.6	
9.400	58.0	H	-30.9	4.2	13.3	11.2	-21.8	-13.0	-8.8	
High Ch										
3.820	55.0	V	-39.5	2.5	8.8	6.6	-33.2	-13.0	-20.2	
5.730	51.3	V	-38.9	3.3	10.6	8.5	-31.6	-13.0	-18.6	
7.640	50.0	V	-38.5	3.8	12.3	10.1	-29.9	-13.0	-16.9	
9.550	56.3	V	-32.4	4.3	13.3	11.2	-23.4	-13.0	-10.4	
3.820	54.6	H	-39.8	2.5	8.8	6.6	-33.5	-13.0	-20.5	
5.730	52.3	H	-36.9	3.3	10.6	8.5	-29.6	-13.0	-16.6	
7.640	50.2	H	-37.5	3.8	12.3	10.1	-28.9	-13.0	-15.9	
9.550	55.8	H	-32.9	4.3	13.3	11.2	-23.9	-13.0	-10.9	
Note: No other emissions were detected above the system noise floor										

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GPRS1900 Spurious & Harmonic (EIRP):

06/08/05 **High Frequency Substitution Measurement**
Compliance Certification Services, Morgan Hill 5m Chamber Site

Test Engr:Chin Pang
Project #:05T3452-1
Company:High Tech Computer
EUT Descrip.:PDA Phone
EUT M/N:WIZA100
Test Target:Part 24
Mode Oper: GPRS1900, PCS Band

Test Equipment:

EMCO Horn 1-18GHz: T120; S/N: 29310 @3m
Horn > 18GHz:
Limit: FCC 24
☑ High Pass Filter
Hi Frequency Cables: ☐ (2 ft) ☑ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T34 HP 8449B
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
GPRS1900										
Low Ch										
3.700	57.0	V	-37.8	2.4	8.6	6.4	-31.6	-13.0	-18.6	
5.550	52.6	V	-37.8	3.2	10.5	8.4	-30.5	-13.0	-17.5	
7.400	50.7	V	-37.9	3.7	12.1	9.9	-29.6	-13.0	-16.6	
9.251	57.8	V	-31.2	4.2	13.3	11.2	-22.1	-13.0	-9.1	
3.700	56.8	H	-37.9	2.4	8.6	6.4	-31.7	-13.0	-18.7	
5.550	50.6	H	-38.8	3.2	10.5	8.4	-31.5	-13.0	-18.5	
7.400	52.0	H	-35.8	3.7	12.1	9.9	-27.5	-13.0	-14.5	
9.251	59.3	H	-29.7	4.2	13.3	11.2	-20.6	-13.0	-7.6	
Mid Ch										
3.760	56.2	V	-38.4	2.5	8.7	6.5	-32.2	-13.0	-19.2	
5.640	54.0	V	-36.3	3.3	10.6	8.4	-29.0	-13.0	-16.0	
7.520	52.5	V	-36.0	3.7	12.2	10.0	-27.6	-13.0	-14.6	
9.400	57.0	V	-31.9	4.2	13.3	11.2	-22.8	-13.0	-9.8	
3.760	55.7	H	-38.8	2.5	8.7	6.5	-32.6	-13.0	-19.6	
5.640	52.0	H	-37.3	3.3	10.6	8.4	-30.0	-13.0	-17.0	
7.520	51.8	H	-35.9	3.7	12.2	10.0	-27.5	-13.0	-14.5	
9.400	56.5	H	-32.4	4.2	13.3	11.2	-23.3	-13.0	-10.3	
High Ch										
3.820	54.9	V	-39.6	2.5	8.8	6.6	-33.3	-13.0	-20.3	
5.730	53.4	V	-36.8	3.3	10.6	8.5	-29.5	-13.0	-16.5	
7.640	54.7	V	-33.8	3.8	12.3	10.1	-25.2	-13.0	-12.2	
9.550	58.3	V	-30.4	4.3	13.3	11.2	-21.4	-13.0	-8.4	
3.820	56.7	H	-37.7	2.5	8.8	6.6	-31.4	-13.0	-18.4	
5.730	52.6	H	-36.6	3.3	10.6	8.5	-29.3	-13.0	-16.3	
7.640	56.6	H	-31.1	3.8	12.3	10.1	-22.5	-13.0	-9.5	
9.550	57.0	H	-31.7	4.3	13.3	11.2	-22.7	-13.0	-9.7	
Note: No other emissions were detected above the system noise floor.										

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EGPRS1900 Spurious & Harmonic (EIRP):

06/08/05 **High Frequency Substitution Measurement**
Compliance Certification Services, Morgan Hill 5m Chamber Site

Test Engr:Chin Pang
Project #:05T3452-1
Company:High Tech Computer
EUT Descrip.:PDA Phone
EUT M/N:WIZA100
Test Target:Part 24
Mode Oper: EGPRS1900, PCS Band

Test Equipment:

EMCO Horn 1-18GHz: T120; S/N: 29310 @3m
Horn > 18GHz:
Limit: FCC 24
☑ High Pass Filter
Hi Frequency Cables: ☐ (2 ft) ☑ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T34 HP 8449B
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
EGPRS1900										
Low Ch										
3.700	51.8	V	-43.0	2.4	8.6	6.4	-36.8	-13.0	-23.8	
5.550	52.0	V	-38.4	3.2	10.5	8.4	-31.1	-13.0	-18.1	
7.400	49.7	V	-38.9	3.7	12.1	9.9	-30.6	-13.0	-17.6	
9.251	56.2	V	-32.8	4.2	13.3	11.2	-23.7	-13.0	-10.7	
3.700	53.0	H	-41.7	2.4	8.6	6.4	-35.5	-13.0	-22.5	
5.550	51.0	H	-38.4	3.2	10.5	8.4	-31.1	-13.0	-18.1	
7.400	55.0	H	-32.8	3.7	12.1	9.9	-24.5	-13.0	-11.5	
9.251	54.3	H	-34.7	4.2	13.3	11.2	-25.6	-13.0	-12.6	
Mid Ch										
3.760	51.8	V	-42.8	2.5	8.7	6.5	-36.6	-13.0	-23.6	
5.640	50.2	V	-40.1	3.3	10.6	8.4	-32.8	-13.0	-19.8	
7.520	49.0	V	-39.5	3.7	12.2	10.0	-31.1	-13.0	-18.1	
9.400	56.0	V	-32.9	4.2	13.3	11.2	-23.8	-13.0	-10.8	
3.760	52.0	H	-42.5	2.5	8.7	6.5	-36.3	-13.0	-23.3	
5.640	50.5	H	-38.8	3.3	10.6	8.4	-31.5	-13.0	-18.5	
7.520	52.4	H	-35.3	3.7	12.2	10.0	-26.9	-13.0	-13.9	
9.400	55.2	H	-33.7	4.2	13.3	11.2	-24.6	-13.0	-11.6	
High Ch										
3.820	51.6	V	-42.9	2.5	8.8	6.6	-36.6	-13.0	-23.6	
5.730	49.3	V	-40.9	3.3	10.6	8.5	-33.6	-13.0	-20.6	
7.640	52.5	V	-36.0	3.8	12.3	10.1	-27.4	-13.0	-14.4	
9.550	55.6	V	-33.1	4.3	13.3	11.2	-24.1	-13.0	-11.1	
3.820	52.6	H	-41.8	2.5	8.8	6.6	-35.5	-13.0	-22.5	
5.730	50.2	H	-39.0	3.3	10.6	8.5	-31.7	-13.0	-18.7	
7.640	53.6	H	-34.1	3.8	12.3	10.1	-25.5	-13.0	-12.5	
9.550	56.2	H	-32.5	4.3	13.3	11.2	-23.5	-13.0	-10.5	
Note: No other emissions were detected above the system noise floor										

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WIZA 110 MODEL (WORST CASE MODULATION)

GSM1900 Spurious & Harmonic (EIRP)

06/08/05 **High Frequency Substitution Measurement**
Compliance Certification Services, Morgan Hill 5m Chamber Site

Test Engr:Chin Pang
Project #:05T3452-1
Company:High Tech Computer
EUT Descrip.:PDA Phone
EUT M/N:WIZA110
Test Target:Part 24
Mode Oper: GSM1900, PCS Band

Test Equipment:

EMCO Horn 1-18GHz: T120; S/N: 29310 @3m
Horn > 18GHz:
Limit: FCC 24
☑ High Pass Filter
Hi Frequency Cables: ☐ (2 ft) ☑ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)
Pre-amplifer 1-26GHz: T34 HP 8449B
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
GSM1900										
Low Ch										
5.550	53.6	V	-36.8	3.2	10.5	8.4	-29.5	-13.0	-16.5	
7.400	55.8	V	-32.8	3.7	12.1	9.9	-24.5	-13.0	-11.5	
9.251	57.1	V	-31.9	4.2	13.3	11.2	-22.8	-13.0	-9.8	
3.700	54.8	H	-39.9	2.4	8.6	6.4	-33.7	-13.0	-20.7	
5.550	53.0	H	-36.4	3.2	10.5	8.4	-29.1	-13.0	-16.1	
7.400	56.2	H	-31.6	3.7	12.1	9.9	-23.3	-13.0	-10.3	
9.251	58.7	H	-30.3	4.2	13.3	11.2	-21.2	-13.0	-8.2	
Mid Ch										
3.760	56.0	V	-38.6	2.5	8.7	6.5	-32.4	-13.0	-19.4	
5.640	52.6	V	-37.7	3.3	10.6	8.4	-30.4	-13.0	-17.4	
7.520	51.0	V	-37.5	3.7	12.2	10.0	-29.1	-13.0	-16.1	
9.400	56.8	V	-32.1	4.2	13.3	11.2	-23.0	-13.0	-10.0	
3.760	54.0	H	-40.5	2.5	8.7	6.5	-34.3	-13.0	-21.3	
5.640	51.5	H	-37.8	3.3	10.6	8.4	-30.5	-13.0	-17.5	
7.520	54.0	H	-33.7	3.7	12.2	10.0	-25.3	-13.0	-12.3	
9.400	59.7	H	-29.2	4.2	13.3	11.2	-20.1	-13.0	-7.1	
High Ch										
5.730	52.0	V	-38.2	3.3	10.6	8.5	-30.9	-13.0	-17.9	
7.640	50.5	V	-38.0	3.8	12.3	10.1	-29.4	-13.0	-16.4	
9.550	56.3	V	-32.4	4.3	13.3	11.2	-23.4	-13.0	-10.4	
5.730	53.8	H	-35.4	3.3	10.6	8.5	-28.1	-13.0	-15.1	
7.640	51.3	H	-36.4	3.8	12.3	10.1	-27.8	-13.0	-14.8	
9.550	57.4	H	-31.3	4.3	13.3	11.2	-22.3	-13.0	-9.3	

Note: No other emssions were detected above the system noise floor.

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WIZA 200 MODEL (WORST CASE MODULATION)

GSM1900 Spurious & Harmonic (EIRP):

06/08/05 **High Frequency Substitution Measurement**
Compliance Certification Services, Morgan Hill 5m Chamber Site

Test Engr:Chin Pang
Project #:05T3452-1
Company:High Tech Computer
EUT Descrip.:PDA Phone
EUT M/N:WIZA200
Test Target:Part 24
Mode Oper: GSM1900, PCS Band

Test Equipment:

EMCO Horn 1-18GHz: T120; S/N: 29310 @3m
Horn > 18GHz:
Limit: FCC 24
☑ High Pass Filter

Hi Frequency Cables: ☐ (2 ft) ☑ (2 ~ 3 ft) ☐ (4 ~ 6 ft) ☑ (12 ft)

Pre-amplifer 1-26GHz: T34 HP 8449B
Pre-amplifer 26-40GHz:

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
GSM1900										
Low Ch										
5.550	54.7	V	-35.7	3.2	10.5	8.4	-28.4	-13.0	-15.4	
7.400	56.5	V	-32.1	3.7	12.1	9.9	-23.8	-13.0	-10.8	
9.251	58.3	V	-30.7	4.2	13.3	11.2	-21.6	-13.0	-8.6	
5.550	56.0	H	-33.4	3.2	10.5	8.4	-26.1	-13.0	-13.1	
7.400	57.3	H	-30.5	3.7	12.1	9.9	-22.2	-13.0	-9.2	
9.251	59.2	H	-29.8	4.2	13.3	11.2	-20.7	-13.0	-7.7	
Mid Ch										
5.640	52.4	V	-37.9	3.3	10.6	8.4	-30.6	-13.0	-17.6	
7.520	51.6	V	-36.9	3.7	12.2	10.0	-28.5	-13.0	-15.5	
9.400	54.7	V	-34.2	4.2	13.3	11.2	-25.1	-13.0	-12.1	
5.640	53.0	H	-36.3	3.3	10.6	8.4	-29.0	-13.0	-16.0	
7.520	54.6	H	-33.1	3.7	12.2	10.0	-24.7	-13.0	-11.7	
9.400	58.5	H	-30.4	4.2	13.3	11.2	-21.3	-13.0	-8.3	
High Ch										
5.730	51.8	V	-38.4	3.3	10.6	8.5	-31.1	-13.0	-18.1	
7.640	52.0	V	-36.5	3.8	12.3	10.1	-27.9	-13.0	-14.9	
9.550	55.1	V	-33.6	4.3	13.3	11.2	-24.6	-13.0	-11.6	
5.730	53.2	H	-36.0	3.3	10.6	8.5	-28.7	-13.0	-15.7	
7.640	56.1	H	-31.6	3.8	12.3	10.1	-23.0	-13.0	-10.0	
9.550	56.8	H	-31.9	4.3	13.3	11.2	-22.9	-13.0	-9.9	
Note: No other emssions were detected above the system noise floor.										

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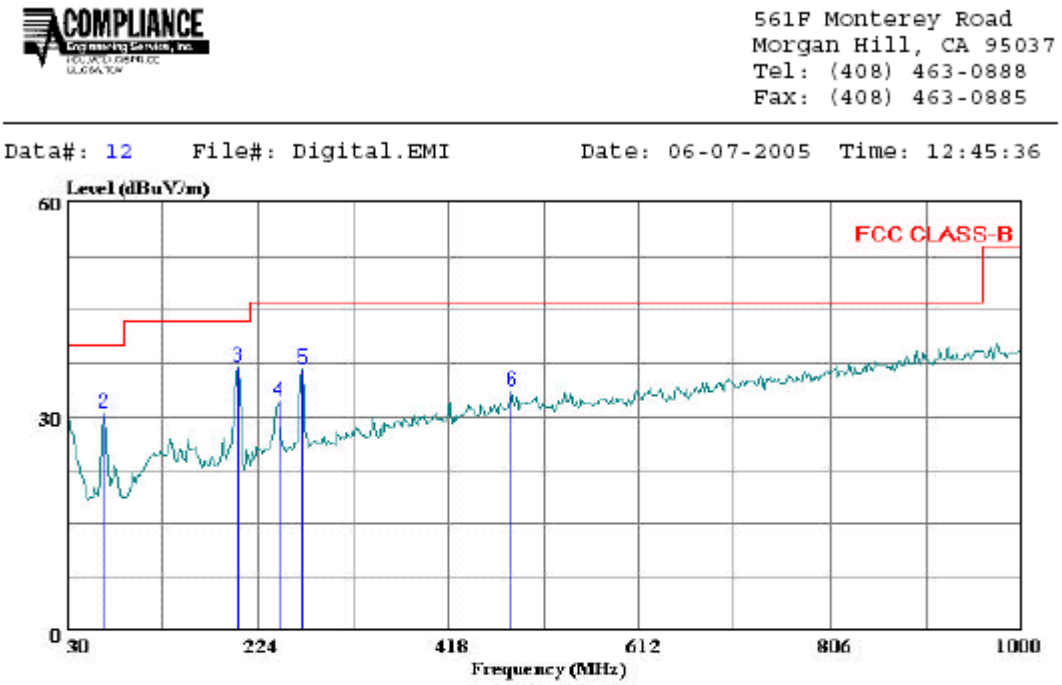
9. DIGITAL DEVICE CONFIGURATION - LIMITS AND RESULTS

9.1. WORST-CASE RADIATED EMISSIONS BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL

HORIZONTAL PLOT



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HORIZONTAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	30.970	9.97	20.45	30.42	40.00	-9.58	Peak
2	67.830	21.38	9.20	30.58	40.00	-9.42	Peak
3	203.630	22.88	14.01	36.89	43.50	-6.61	Peak
4	245.340	18.48	13.72	32.20	46.00	-13.80	Peak
5	269.590	22.23	14.61	36.84	46.00	-9.16	Peak
6	482.990	13.85	19.89	33.74	46.00	-12.26	Peak

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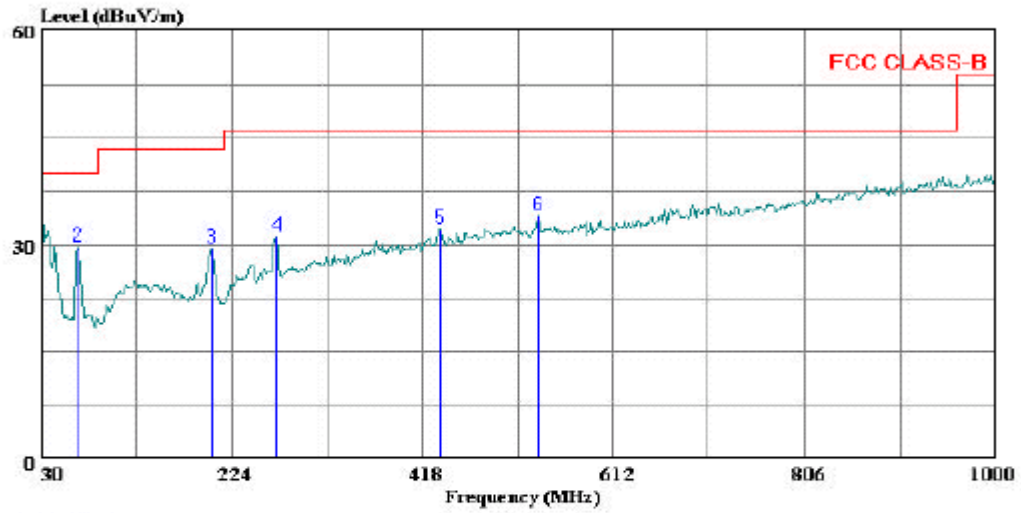
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT

561F Monterey Road
Morgan Hill, CA 95037
Tel: (408) 463-0888
Fax: (408) 463-0885

Data#: 10 File#: Digital.EMI Date: 06-07-2005 Time: 12:41:04



(Audix ATC)
Trace: 9 Ref Trace:

Condition: FCC CLASS-B VERTICAL
Test Operator: : Thanh Nguyen
Project #: : 05I3442-1
Company: : HiTech Computer, Corp.
EUT: : PDA Phone, 802.11b/g,BT
Model No. : WIZA100
Configuration : EUT connect to PC with minimum
: configuration.
Target of Test : FCC CLASS B
Mode of Operation: Link to PC

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VERTICAL DATA

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	30.000	19.20	20.45	39.65	40.00	-0.35	Peak
2	67.830	20.51	9.20	29.71	40.00	-10.29	Peak
3	203.630	15.38	14.01	29.39	43.50	-14.11	Peak
4	269.590	16.49	14.61	31.10	46.00	-14.90	Peak
5	436.430	13.28	18.89	32.17	46.00	-13.83	Peak
6	536.340	13.28	20.73	34.01	46.00	-11.99	Peak

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9.2. POWERLINE CONDUCTED EMISSIONS

LIMIT

§15.107 (a) (a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

ANSI C63.4

RESULTS

No non-compliance noted:

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6 WORST EMISSIONS

CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	FCC_B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.76	37.94	--	--	0.00	56.00	46.00	-18.06	-8.06	L1
3.33	29.48	--	--	0.00	56.00	46.00	-26.52	-16.52	L1
12.99	33.24	--	--	0.00	60.00	50.00	-26.76	-16.76	L1
0.22	40.96	--	--	0.00	63.01	53.01	-22.05	-12.05	L2
0.76	36.40	--	--	0.00	56.00	46.00	-19.60	-9.60	L2
11.56	33.40	--	--	0.00	60.00	50.00	-26.60	-16.60	L2
6 Worst Data									

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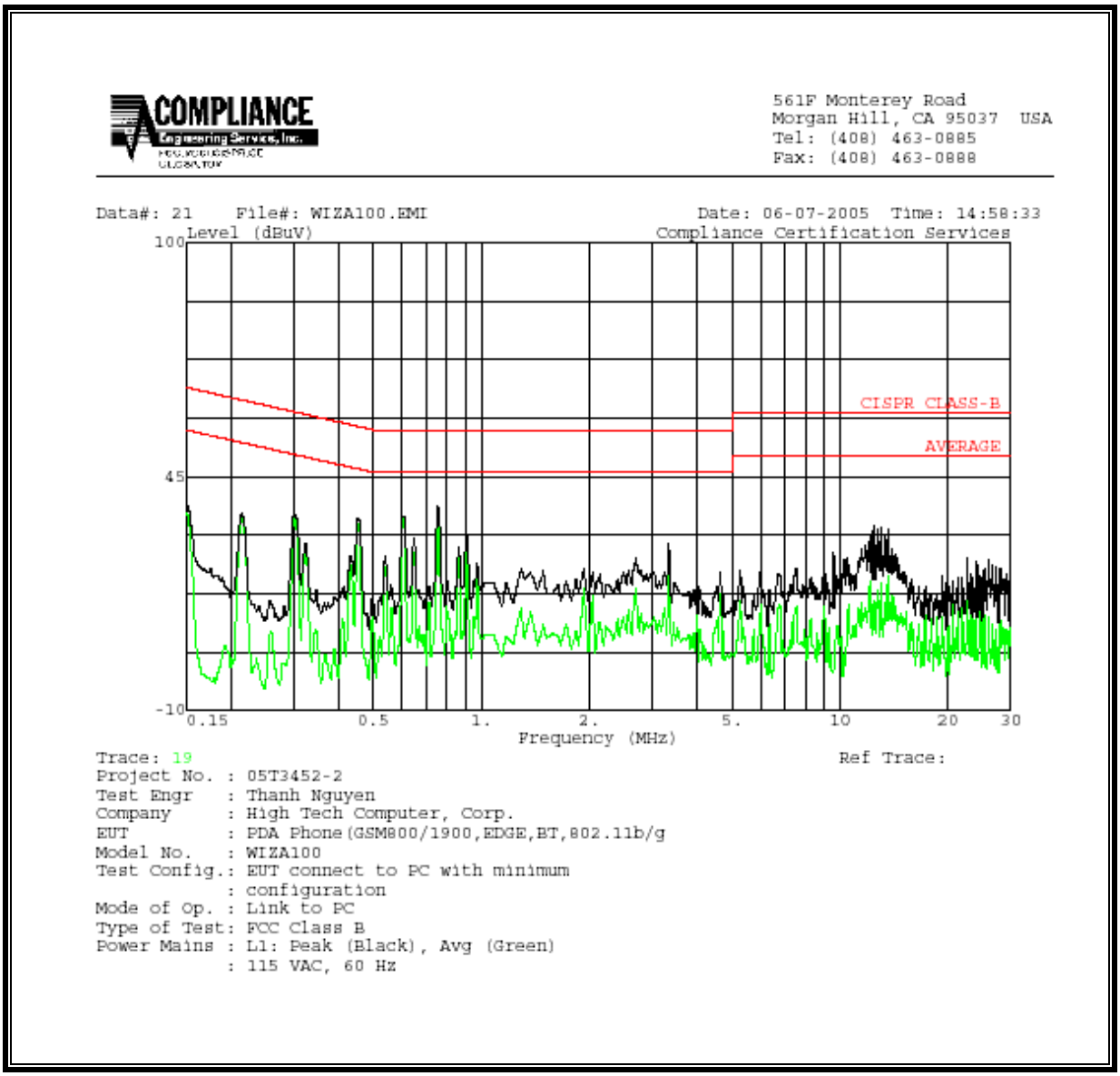
LINE 1 RESULTS



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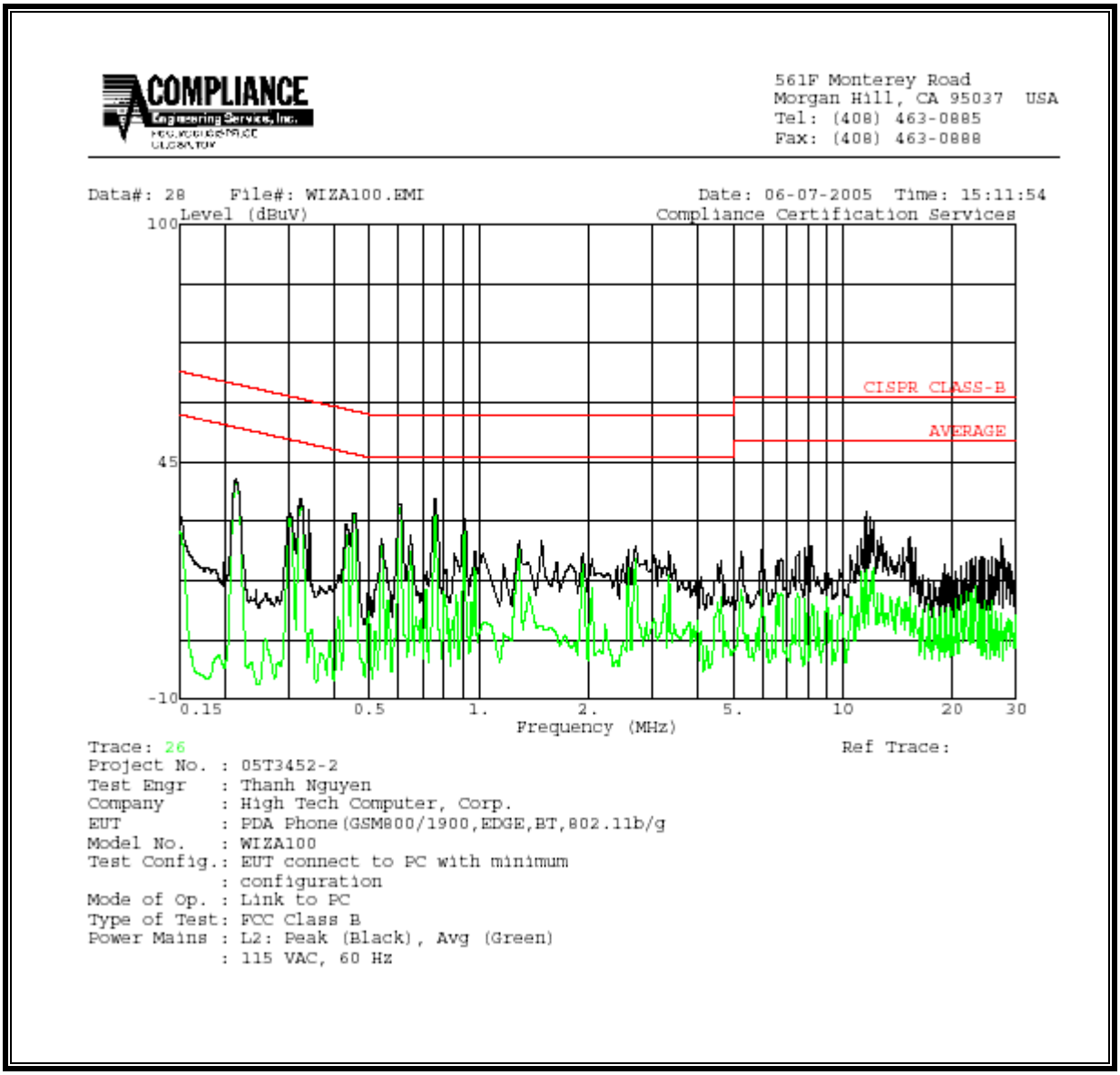
LINE 2 RESULTS



(Note: Setup Photos on pages 96 through 107 have been extracted under separate document purposely.)

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