



**FCC CFR47 PART 22 SUBPART H
FCC CFR47 PART 24 SUBPART E
INDUSTRY CANADA RSS-132 ISSUE 2
INDUSTRY CANADA RSS-133 ISSUE 5
CERTIFICATION TEST REPORT
FOR**

UMTS PHONE WITH 802.11B/G AND BLUETOOTH

MODEL NUMBER: P102UNA

FCC ID: O8F-ROAU

IC: 3905A-ROAU

REPORT NUMBER: 10U13380-3

ISSUE DATE: SEPTEMBER 30, 2010

Prepared for

**PALM
950 MAUDE AVENUE
SUNNYVALE, CA 94085, U.S.A.**

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
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TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	4
2. TEST METHODOLOGY	5
3. FACILITIES AND ACCREDITATION	5
4. CALIBRATION AND UNCERTAINTY	5
4.1. MEASURING INSTRUMENT CALIBRATION	5
4.2. SAMPLE CALCULATION	5
4.3. MEASUREMENT UNCERTAINTY	5
5. EQUIPMENT UNDER TEST	6
5.1. DESCRIPTION OF EUT	6
5.2. MAXIMUM OUTPUT POWER	7
5.3. DESCRIPTION OF AVAILABLE ANTENNS	7
5.4. SOFTWARE AND FIRMWARE	7
5.5. WORST-CASE CONFIGURATION AND MODE	8
5.6. DESCRIPTION OF TEST SETUP	9
6. TEST AND MEASUREMENT EQUIPMENT	13
7. CONDUCTED TEST RESULTS	14
7.1. POWER OUTPUT	14
7.1.1. GSM	14
7.1.2. UMTS RELEASE 99	15
7.1.3. UMTS HSDPA	15
7.2. OCCUPIED BANDWIDTH	17
7.3. SPURIOUS EMISSION SPURIOUS EMISSION AT ANTENNA TERMINAL	32
7.4. FREQUENCY STABILITY	73
8. RADIATED TEST RESULTS	76
8.1. RADIATED POWER (ERP & EIRP)	76
8.2. FIELD STRENGTH OF SPURIOUS RADIATION	94
8.3. RECEIVER SPURIOUS EMISSIONS	111
8.4. POWER LINE CONDUCTED EMISSION	119
9. SETUP PHOTOS	125

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: PALM
950 MAUDE AVENUE
SUNNYVALE, CA 94085, U.S.A.

EUT DESCRIPTION: UMTS PHONE WITH 802.11B/G AND BLUETOOTH

MODEL: P102UNA

SERIAL NUMBER: RD1BN6TA6849

DATE TESTED: SEPTEMBER 07 TO 30, 2010

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 22 Subpart H and 24 Subpart E	Pass
IC RSS-132 Issue 2 and RSS-133 Issue 5	Pass

Compliance Certification Services, Inc. (CCS) tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by CCS based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

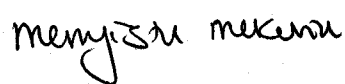
Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by CCS will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

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Tested By:



MENGISTU MEKURIA
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with TIA-603-C, FCC CFR 47 Part 2, FCC CFR 47 Part 22, and FCC CFR Part 24, RSS-132 Issue 2, RSS-133 Issue 5

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

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

4. CALIBRATION AND UNCERTAINTY

4.1. 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.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) +
Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.94 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is GSM/GPRS/EDGE850/900/1800/1900, UMTS/HSDPA 850/1900, 802.11bg & BT2.1 +EDR.

GENERAL INFORMATION

Power Requirements	100-240 VAC / 50-60 Hz
List of frequencies generated or used by the EUT	1000MHz

ACCESSORIES

The EUT was constructed and using the following accessories:

Accessories Description	Manufacturer/ Trademark	Part Number
AC Power Adapter source #1 Input Rating: 100–240 Vac, 50/60Hz, 0.2A Output Rating: 5Vdc, 1000mA	Palm	157-10124-00
Inductive Charging Dock Input Rating: 5Vdc, 1000mA	Palm	157-10123-00
Battery source #1 (Cell Origin Japan) Type: Rechargeable Li-ion Polymer Rating: 3.7Vdc, 1150mAh (minimum)	Palm	157-10119-00
Earphone	Palm	180-10632-00
USB cable	Palm	180-10647-00
Inductive Back Cover (black color)	Palm	180-10704-00

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum ERP & EIRP output powers as follows:

Part 22 Cellular Band

Frequency range (MHz)	Modulation	Conducted		ERP	
		dBm	mW	dBm	mW
824.2 – 848.80	GPRS	31.53	1422.3	30.80	1202.3
824.2 – 848.80	EGPRS	29.64	920.4	28.20	660.7
826.4 – 846.6	UMTS, REL99	25.83	382.8	24.10	257.0
826.4 – 846.6	UMTS, HSDPA	26.90	489.8	26.70	467.7

Part 24 PCS Band

Frequency range (MHz)	Modulation	Conducted		EIRP	
		dBm	mW	dBm	mW
1850.20 – 1909.8	GPRS	29.23	837.5	29.90	977.2
1850.20 – 1909.8	EGPRS	29.16	824.1	28.40	691.8
1852.4 – 1907.6	UMTS, REL99	24.42	276.7	27.60	575.4
1852.4 – 1907.6	UMTS, HSDPA	25.44	349.9	27.70	588.8

5.3. DESCRIPTION OF AVAILABLE ANTENNS

The radio utilizes a PCB integrated antenna with a maximum gain of 2.3dBi for Cell band and 2.3dBi for PCS band.

5.4. SOFTWARE AND FIRMWARE

The EUT is linked with Wireless Communication Test Set.

5.5. WORST-CASE CONFIGURATION AND MODE

The worst-case channel is determined as the channel with the highest output power.

Based on the investigation results, the highest peak power and enhanced data rate is the worst-case scenario for all measurements.

Worst case modes:

- Cellular Band:
 - GSM (GSMK) – with highest peak power
 - EGPRS (8PSK) – with Enhanced Data rates
 - UMTS REL. 99
 - UMTS HSDPA
- PCS Band:
 - GSM (GSMK) – with highest peak power
 - EGPRS (8PSK) – with Enhanced Data rates
 - UMTS REL. 99
 - UMTS HSDPA

For the fundamental investigation, since the EUT is a portable device that has three orientations; therefore X, Y and Z orientations have been investigated, also with AC/DC adapter, and inductive charging dock position, and the worst case was found to be at Y orientation without AC/DC adapter.

The worst-case configuration has been evaluated on EUT with antenna @ Y-position for both 850MHz and 1900MHz bands by comparing the fundamental ERP / EIRP output power.

For the AC line conducted test, both worst configurations were tested as EUT with AC/DC adapter and EUT with inductive charging dock.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
DC Power Supply	XANTREX	XHR 60-18	NA	NA
Communication Test Set	R&S	CMU200	106291	NA
Directional Coupler	Amplifier Research	DC7144A	NA	NA
EarPhone	Palm	NA	NA	NA

I/O CABLES (CONDUCTED TEST)

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	NA
2	RF In/Out	1	Directional Coupler	Un-shielded	1m	NA
3	RF In/Out	1	Communication Test Set	Un-shielded	1.2m	NA
4	RF In/Out	1	Phone	Un-shielded	0.1m	NA

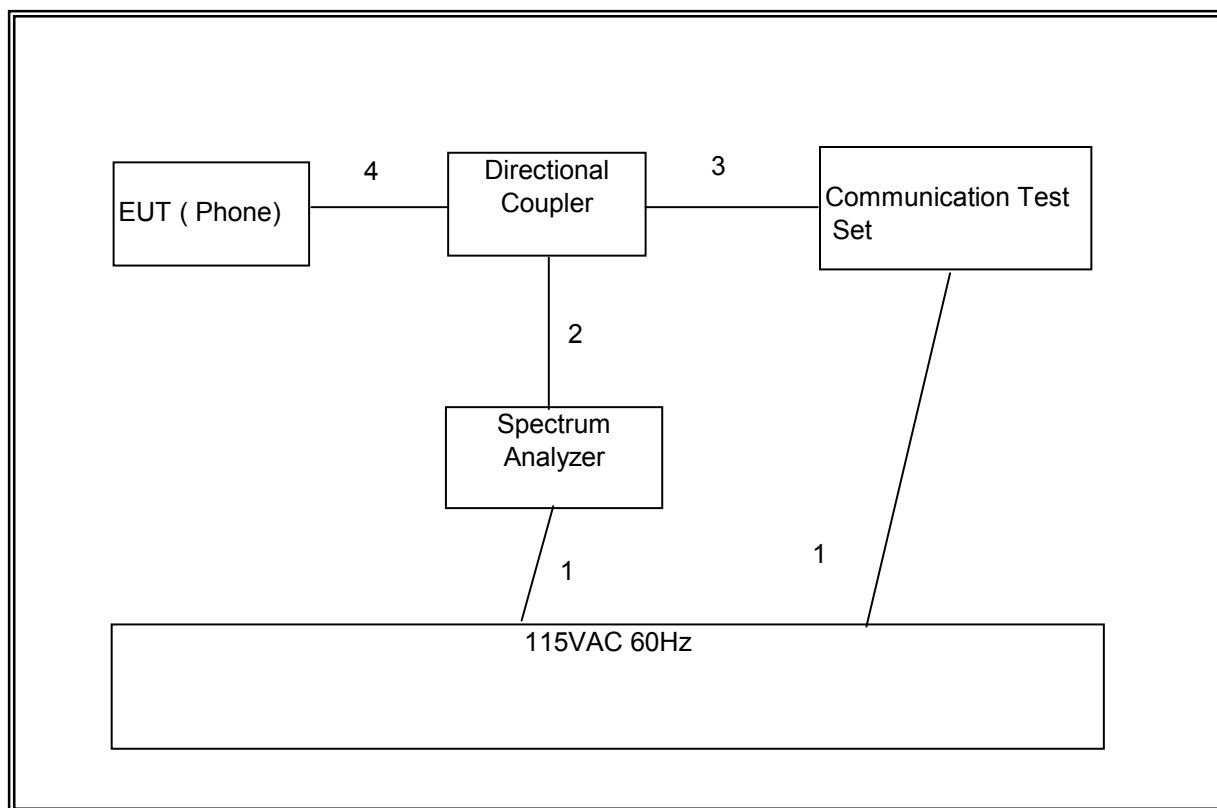
I/O CABLES (RADIATED TEST)

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	1	US 115V	Un-shielded	2m	NA
2	DC	1	DC	Un-shielded	None	NA
4	Audio	1	Earphone	Un-shielded	1m	NA
3	RF In/Out	1	Horn	Un-shielded	4m	NA

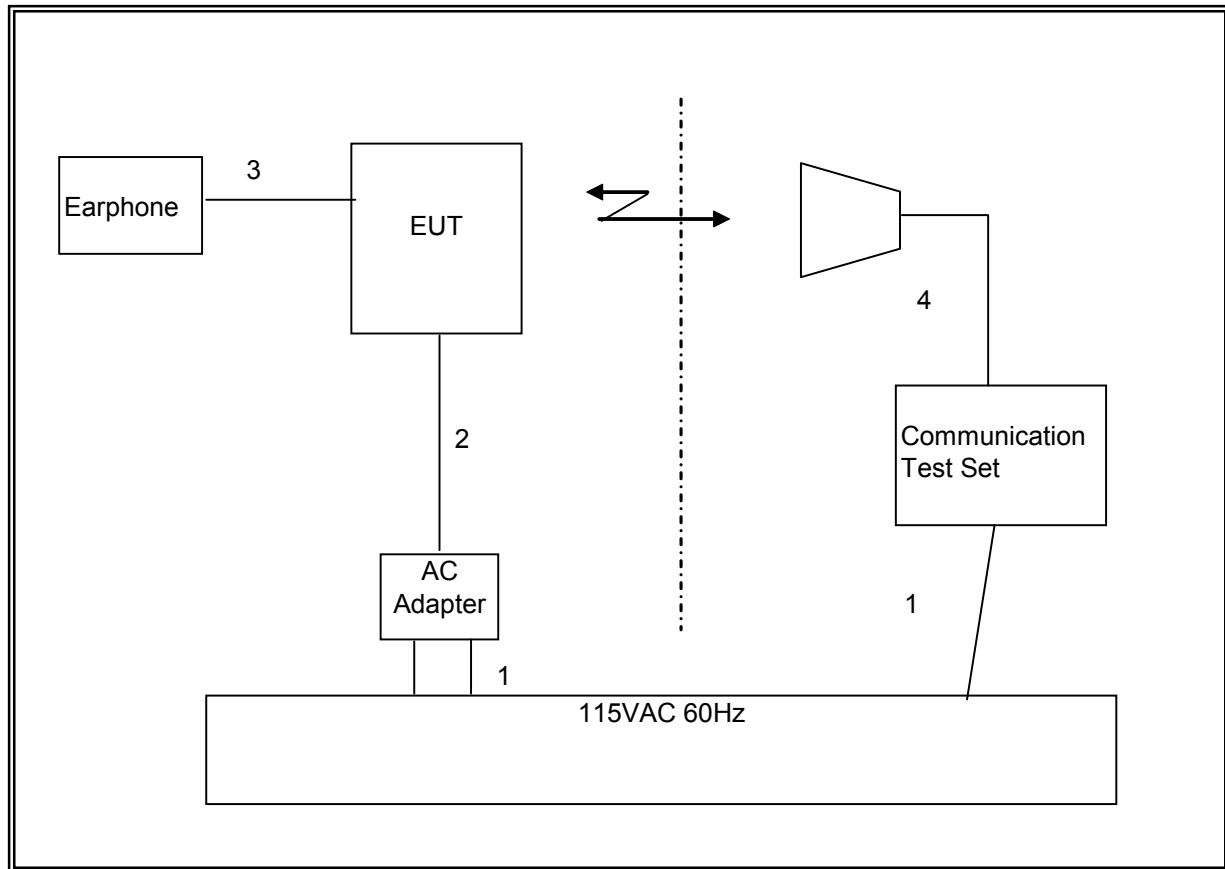
TEST SETUP

The EUT is a stand alone device. A link is established between the EUT and the CMU200 communications test set.

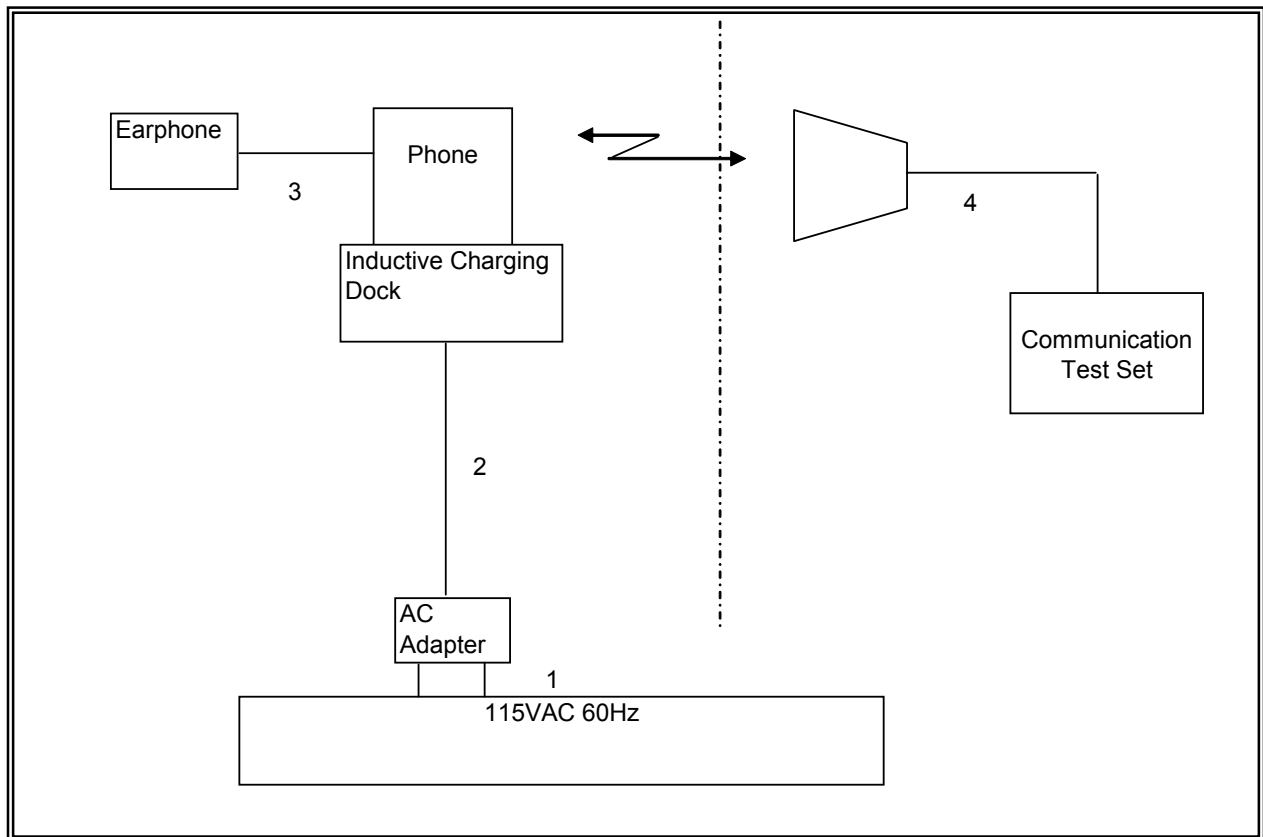
SETUP DIAGRAM FOR CONDUCTED TESTS



SETUP DIAGRAM FOR RADIATED TESTS



SETUP DIAGRAM FOR EUT WITH INDUCTIVE CHARGING DOCK



6. 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	Asset	Cal Due
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01063	07/14/11
Antenna, Horn, 18 GHz	EMCO	3115	C00945	06/29/11
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01016	07/12/11
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01159	05/08/11
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01178	08/30/11
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C00996	10/29/11
Communications Test Set	Agilent / HP	E5515C	C01086	06/17/11
Communication Test Set	R & S	CMU 200	C01131	02/27/11
Peak Power Meter	Boonton	4541	C01189	02/26/11
Peak Power Sensor	Boonton	57006	C01203	02/24/11
Temperature / Humidity Chamber	Thermotron	SE 600-10-10	C00930	04/11/11
Highpass Filter, 2.7 GHz	Micro-Tronics	HPM13194	N02687	CNR
Highpass Filter, 1.5 GHz	Micro-Tronics	HPM13193	N02688	CNR
DC power supply, 60 V @ 18 A	Xantrex	XHR-60-18	C01064	CNR
Directional Coupler, 18 GHz	Krytar	1817	N02656	CNR
Signal Generator, 20 GHz	Agilent / HP	83732B	C00774	07/14/12
Antenna, Tuned Dipole 400~1000	ETS	3121C DB4	C00993	07/10/11

7. CONDUCTED TEST RESULTS

7.1. POWER OUTPUT

7.1.1. GSM

GPRS (GMSK) - Coding Scheme: MCS4						
Band	Ch No.	f (MHz)	Power (dBm)			
			1 slot	2 slot	3 slot	4 slot
			Peak Pwr	Peak Pwr	Peak Pwr	Peak Pwr
GSM850	128	824.20	31.49	29.40	27.41	25.98
	190	836.60	31.53	29.44	27.42	25.98
	251	848.80	31.40	29.34	27.35	25.91
GSM1900	512	1850.20	28.93	28.87	28.82	27.26
	661	1880.00	28.47	28.42	28.32	26.82
	810	1909.80	28.91	28.88	28.83	27.27
EGPRS (8PSK) - Coding Scheme: MCS9						
Band	Ch No.	f (MHz)	Power (dBm)			
			1 slot	2 slot	3 slot	4 slot
			Peak Pwr	Peak Pwr	Peak Pwr	Peak Pwr
GSM850	128	824.20	29.61	29.64	29.60	29.06
	190	836.60	29.63	29.63	29.59	29.06
	251	848.80	29.62	29.59	29.54	29.02
GSM1900	512	1850.20	29.15	29.16	29.09	29.04
	661	1880.00	28.66	28.69	28.59	28.56
	810	1909.80	29.12	29.11	29.07	29.03

7.1.2. UMTS RELEASE 99

The following tests were completed according to the test requirements outlined in section 5.2 of the 3GPP TS34.121-1 specification. The EUT supports power Class 3, which has a nominal maximum output power of 24 dBm (+1.7/-3.7).

WCDMA General Settings	Mode	Rel99
	Subtest	-
	Loopback Mode	Test Mode 1
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	β_c/β_d	8/15

Results

Rel 99 (12.2kps RMC)					
Band	Mode	UL Ch No.	DL Ch No.	f (MHz)	Peak Tx Power (dBm)
UMTS850 (Band V)	Rel 99 12.2kps RMC	4132	4357	826.4	25.63
		4183	4408	836.4	25.22
		4233	4458	846.6	25.83
UMTS1900 (Band II)	Rel 99 12.2kps RMC	9262	9662	1852.4	24.42
		9400	9800	1880.0	24.21
		9538	9938	1907.6	24.33

7.1.3. UMTS HSDPA

The following 4 Sub-tests were completed according to Release 5 procedures in section 5.2 of 3GPP TS34.121. A summary of these settings are illustrated below:

	Mode	Rel5 HSDPA	Rel5 HSDPA	Rel5 HSDPA	Rel5 HSDPA
	Subtest	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set1			
	Power Control Algorithm	Algorithm 2			
	β_c	2/15	12/15	15/15	15/15
	β_d	15/15	15/15	8/15	4/15
	Bd (SF)	64			
	β_c/β_d	2/15	12/15	15/8	15/4
	β_{hs}	4/15	24/15	30/15	30/15
HSDPA Specific Settings	CM (dB)	0	1	1.5	1.5
	D_{ACK}	8			
	D_{NAK}	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback (Table 5.2B.4)	4ms			
	CQI Repetition Factor (Table 5.2B.4)	2			
	$A_{hs} = \beta_{hs}/\beta_c$	30/15			

Results

Mode	UL Ch No.	DL Ch No.	f (MHz)	Peak Tx Pwr (dBm)
Subtest 1	4132	4357	826.4	24.75
	4183	4408	836.6	24.72
	4233	4458	846.6	25.12
Subtest 2	4132	4357	826.4	26.86
	4183	4408	836.6	25.86
	4233	4458	846.6	26.90
Subtest 3	4132	4357	826.4	26.36
	4183	4408	836.0	25.43
	4233	4458	846.6	26.49
Subtest 4	4132	4357	826.4	26.71
	4183	4408	836.4	25.74
	4233	4458	846.6	26.80
Subtest 1	9262	9662	1852.4	24.98
	9400	9800	1880.0	24.71
	9538	9938	1907.6	24.53
Subtest 2	9262	9662	1852.4	25.38
	9400	9800	1880.0	25.42
	9538	9938	1907.6	25.17
Subtest 3	9262	9662	1852.4	25.14
	9400	9800	1880.0	25.10
	9538	9938	1907.6	25.08
Subtest 4	9262	9662	1852.4	25.44
	9400	9800	1880.0	25.42
	9538	9938	1907.6	25.41

7.2. OCCUPIED BANDWIDTH

LIMITS

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.

MODES TESTED

- GSM - GSM (GSMK) & EGPRS (8PSK)
- UMTS – REL 99 & HSDPA

RESULTS

CELL,GPRS Modulation

Channel	Frequency (MHz)	99% BW (kHz)	-26dB BW (kHz)
Low	824.20	238.388	286.363
Middle	836.60	253.690	299.319
High	848.80	234.353	294.748

CELL,EGPRS Modulation

Channel	Frequency (MHz)	99% BW (kHz)	-26dB BW (kHz)
Low	824.20	249.660	297.243
Middle	836.60	249.964	282.508
High	848.80	245.247	279.379

CELL, UMTS REL. 99 Modulation

Channel	Frequency (MHz)	99% BW (MHz)	-26dB BW (MHz)
Low	826.40	4.233	4.640
Middle	836.60	4.195	4.577
High	846.60	4.164	4.588

CELL, UMTS HSDPA Modulation

Channel	Frequency (MHz)	99% BW (MHz)	-26dB BW (MHz)
Low	826.40	4.213	4.617
Middle	836.60	4.259	4.654
High	846.60	4.131	4.618

PCS,GPRS Modulation

Channel	Frequency (MHz)	99% BW (kHz)	-26dB BW (kHz)
Low	1850.20	245.588	310.054
Middle	1880.00	238.854	288.216
High	1909.80	251.196	302.357

PCS,EGPRS Modulation

Channel	Frequency (MHz)	99% BW (kHz)	-26dB BW (kHz)
Low	1850.20	244.307	289.062
Middle	1880.00	241.650	288.481
High	1909.80	241.814	292.830

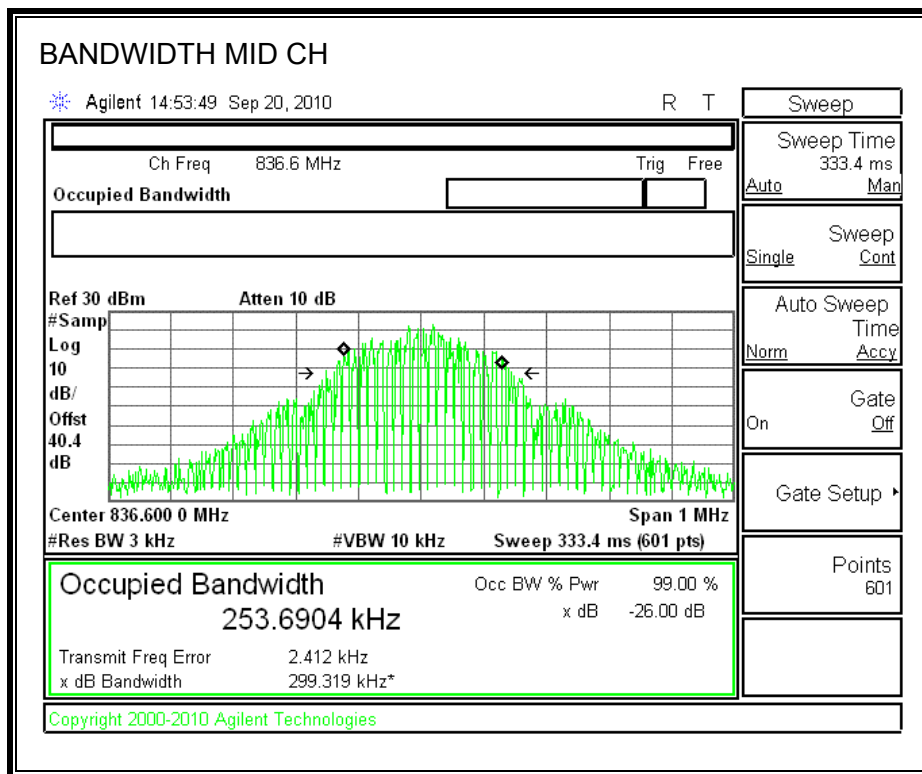
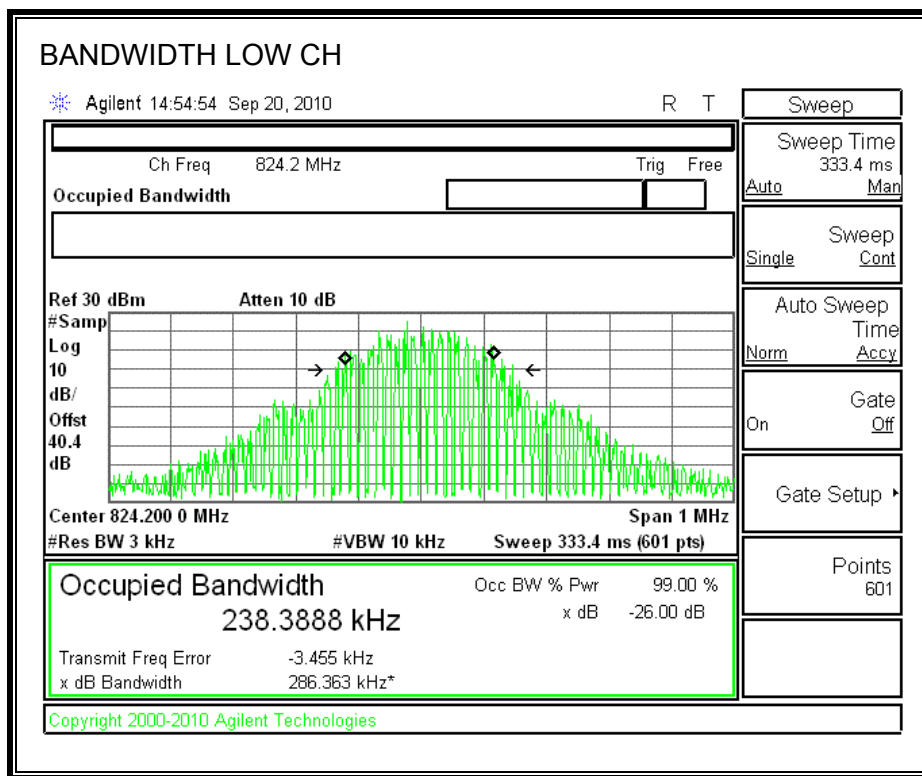
PCS, UMTS REL.99 Modulation

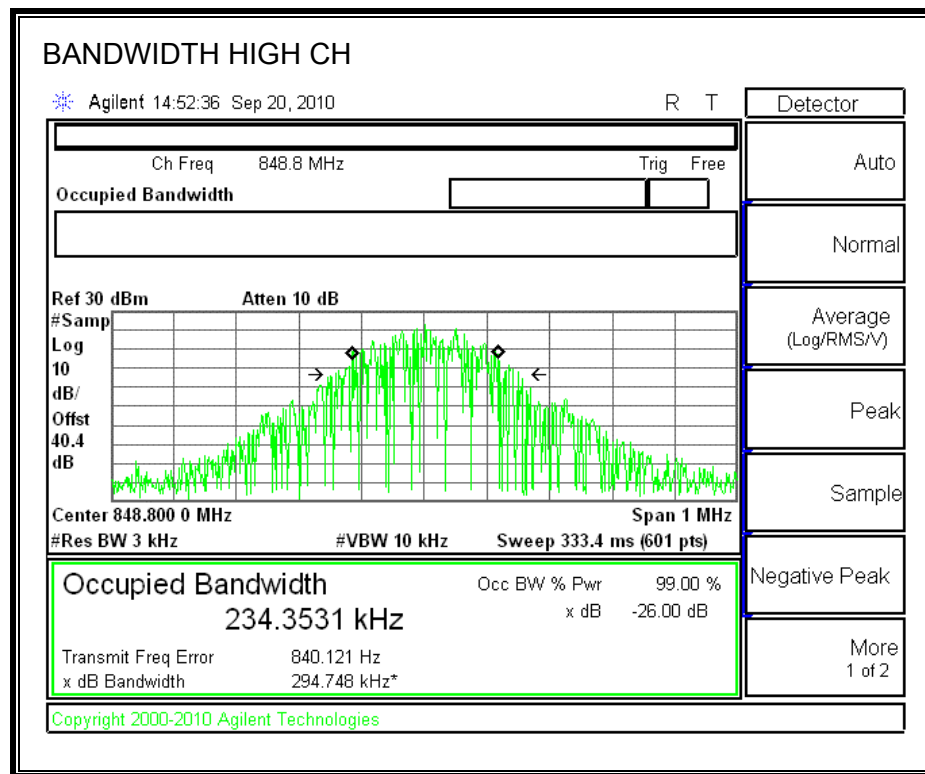
Channel	Frequency (MHz)	99% BW (MHz)	-26dB BW (MHz)
Low	1852.40	4.138	4.528
Middle	1880.00	4.163	4.614
High	1907.60	4.214	4.619

PCS,UMTS HSDPA Modulation

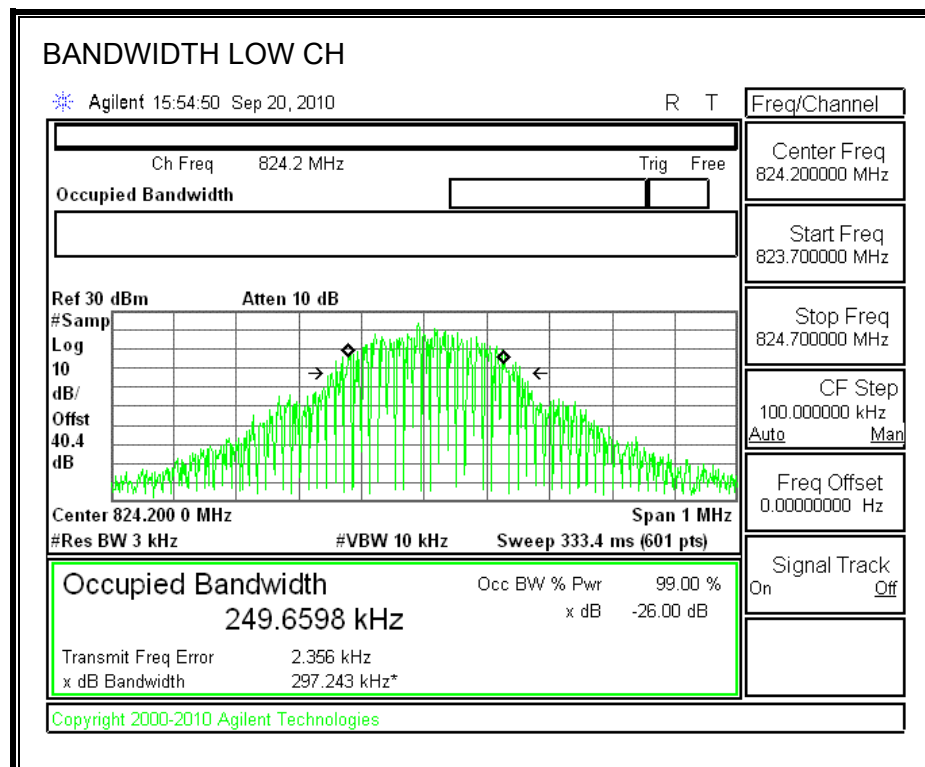
Channel	Frequency (MHz)	99% BW (MHz)	-26dB BW (MHz)
Low	1852.40	4.162	4.578
Middle	1880.00	4.137	4.598
High	1907.60	4.154	4.627

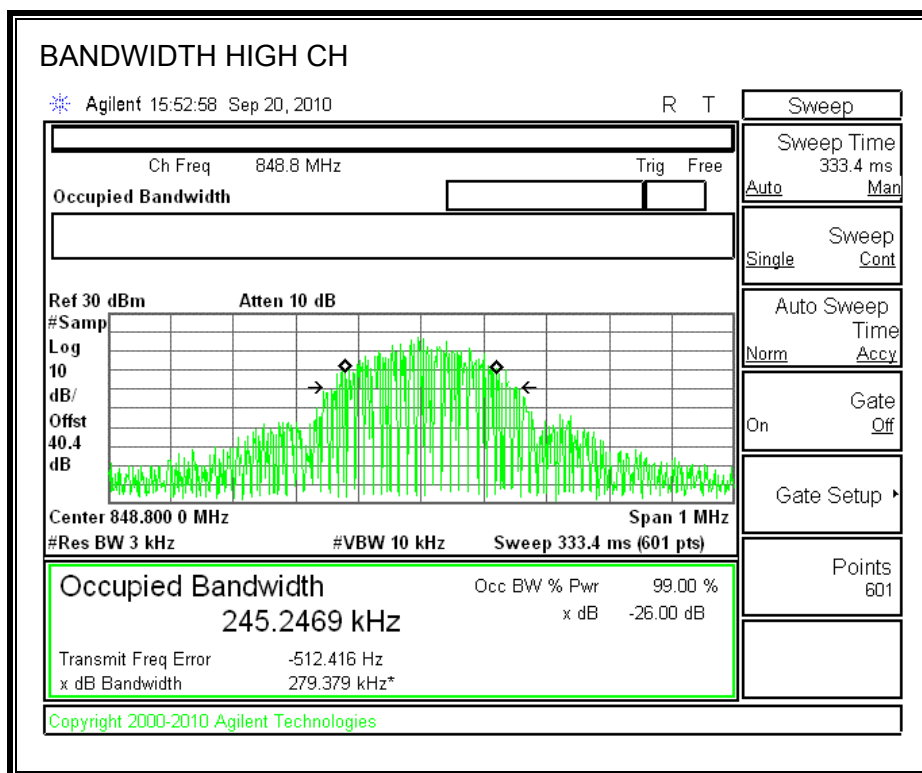
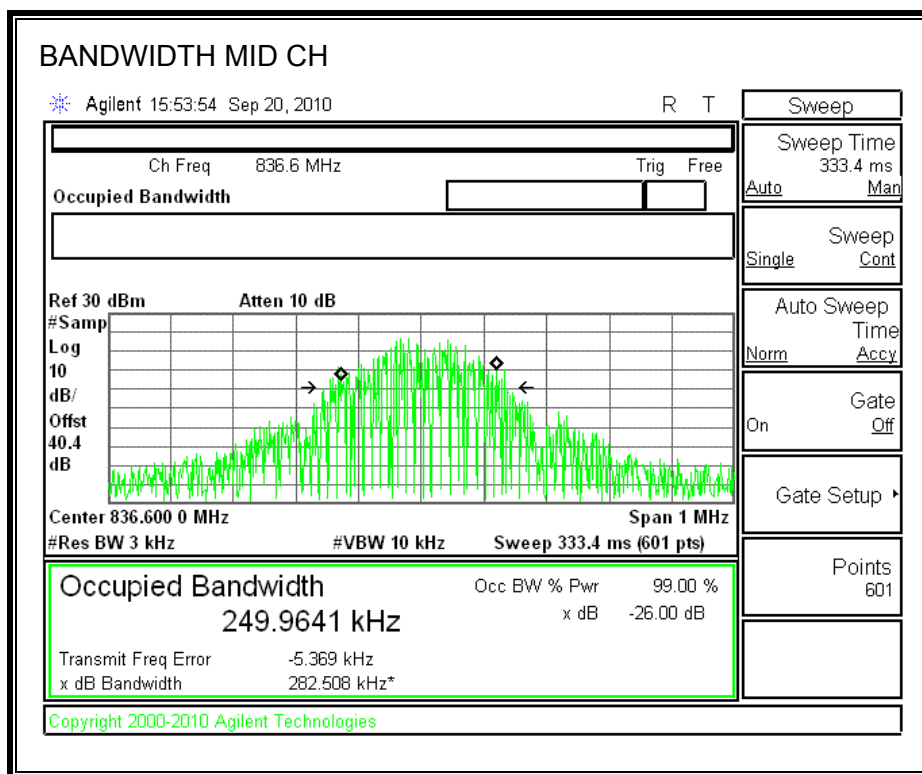
CELL, GPRS850 BANDWIDTH



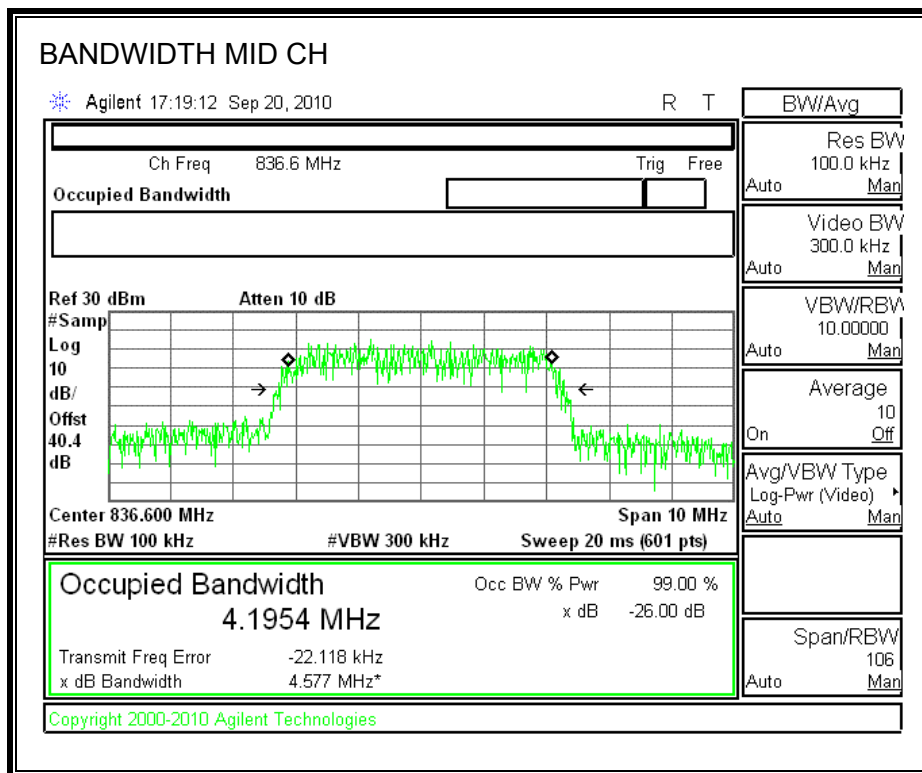
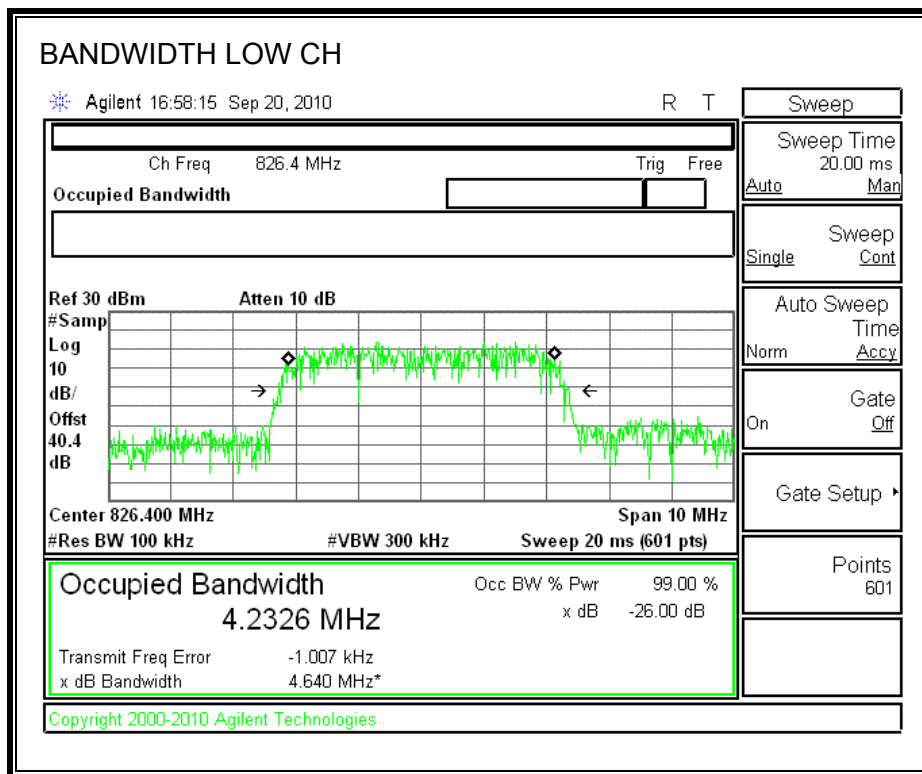


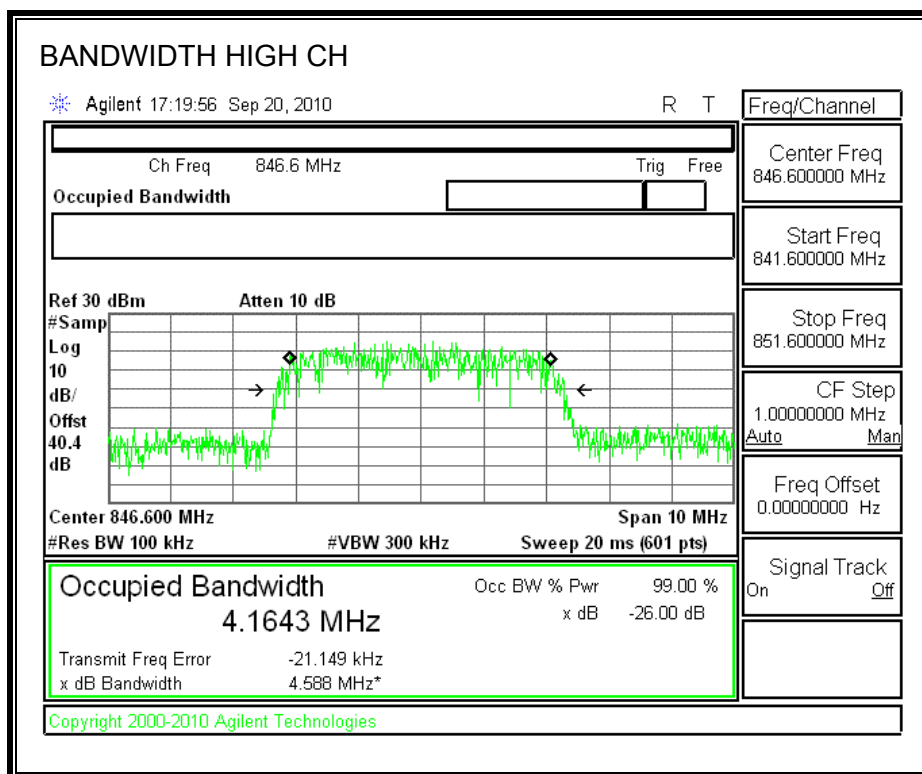
CELL, EGPRS850 BANDWIDTH



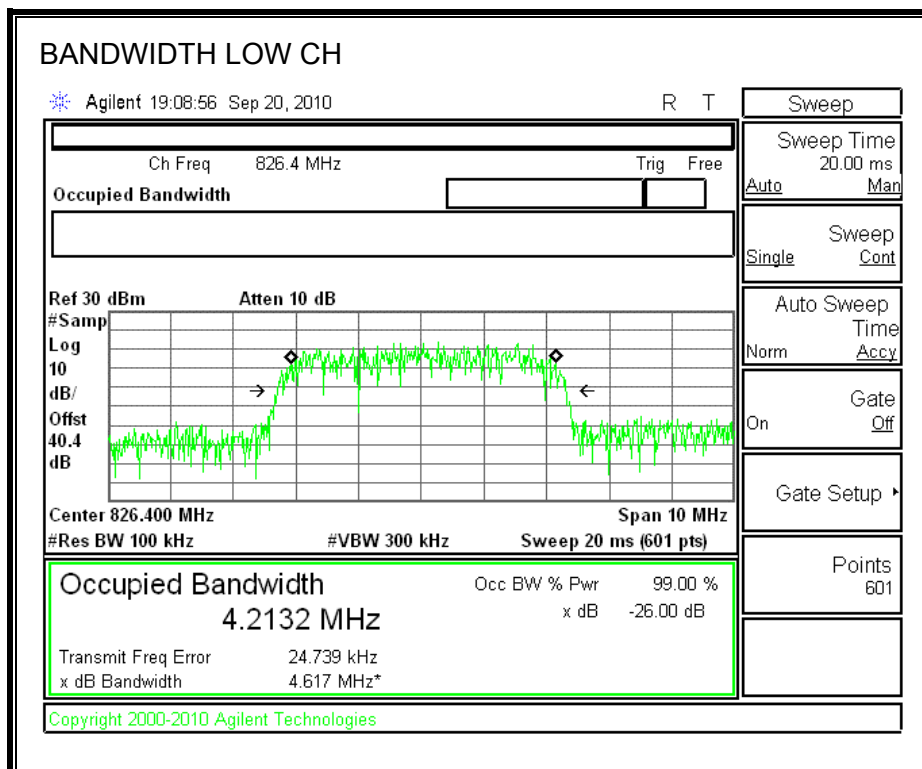


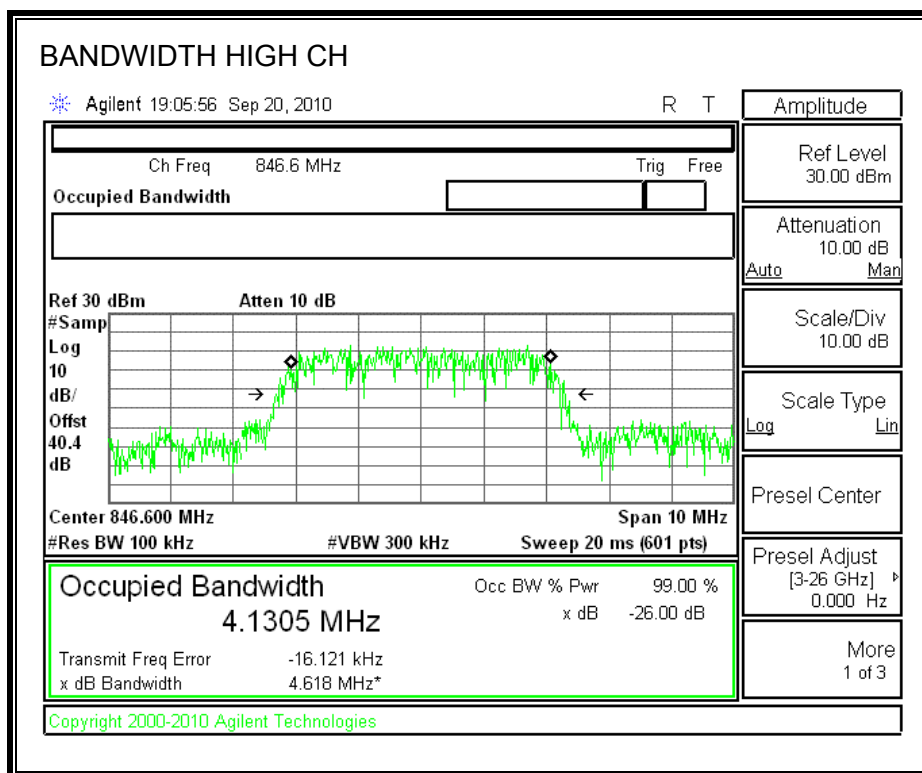
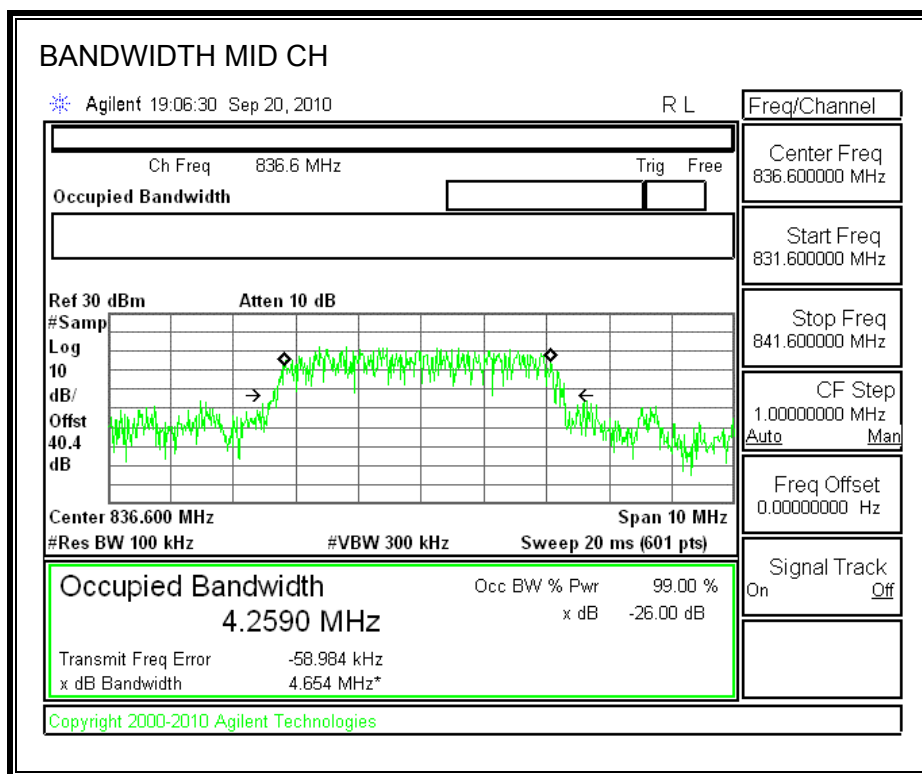
CELL, UMTS REL 99 BANDWIDTH



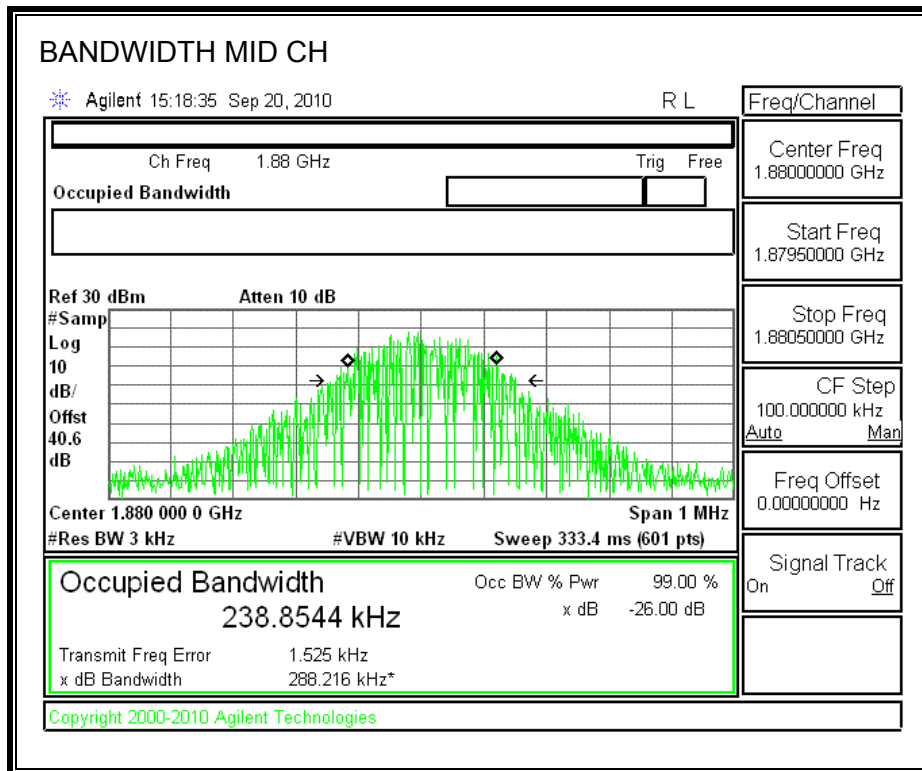
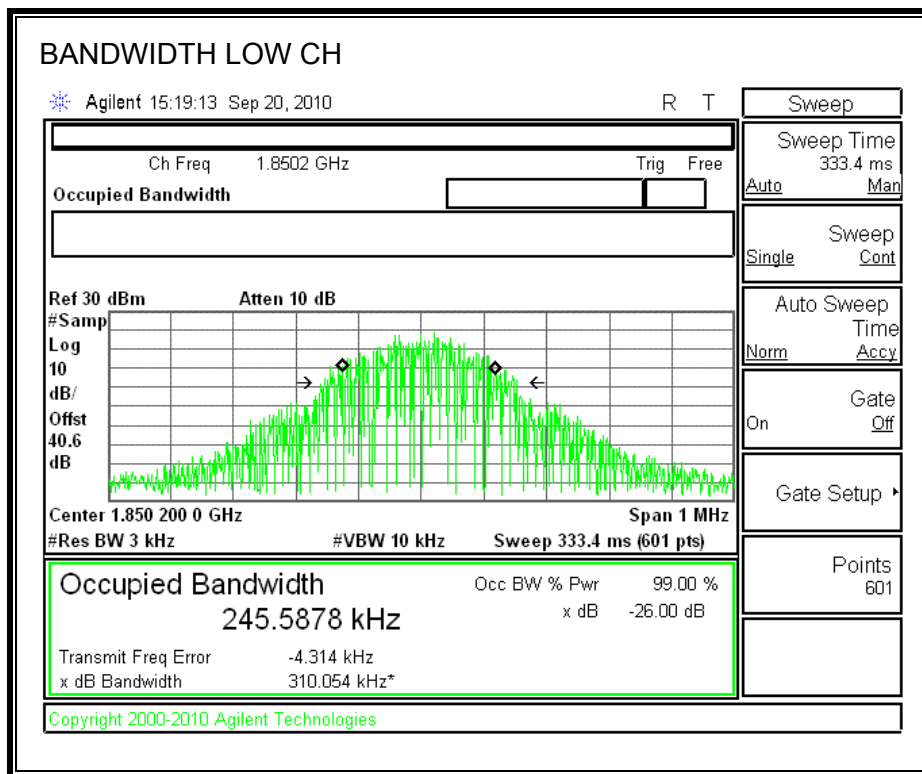


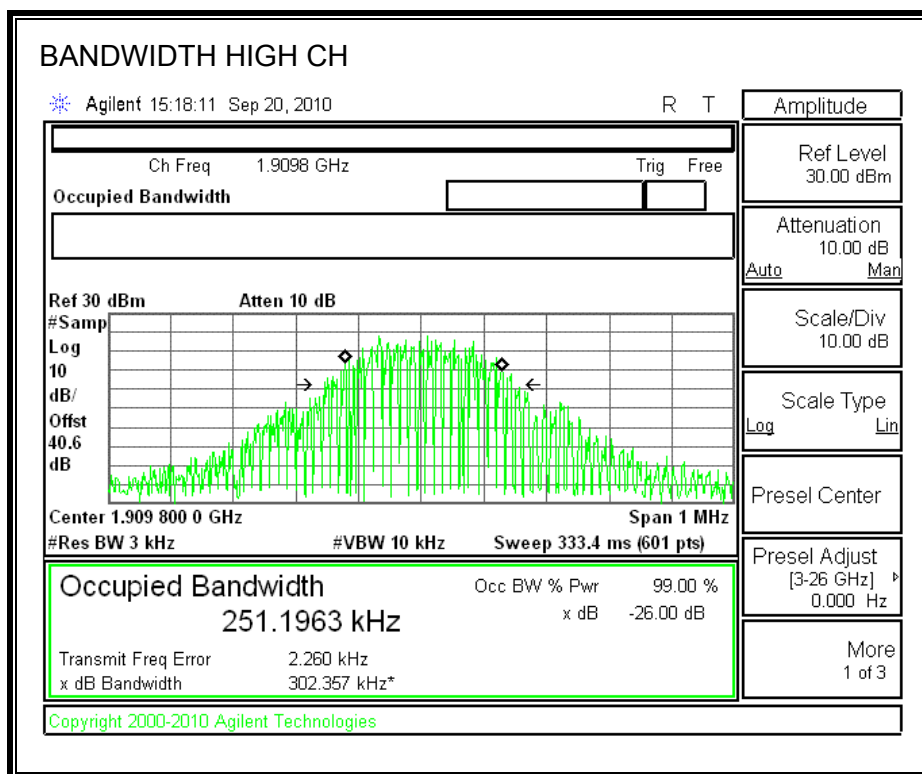
CELL, UMTS HSDPA BANDWIDTH



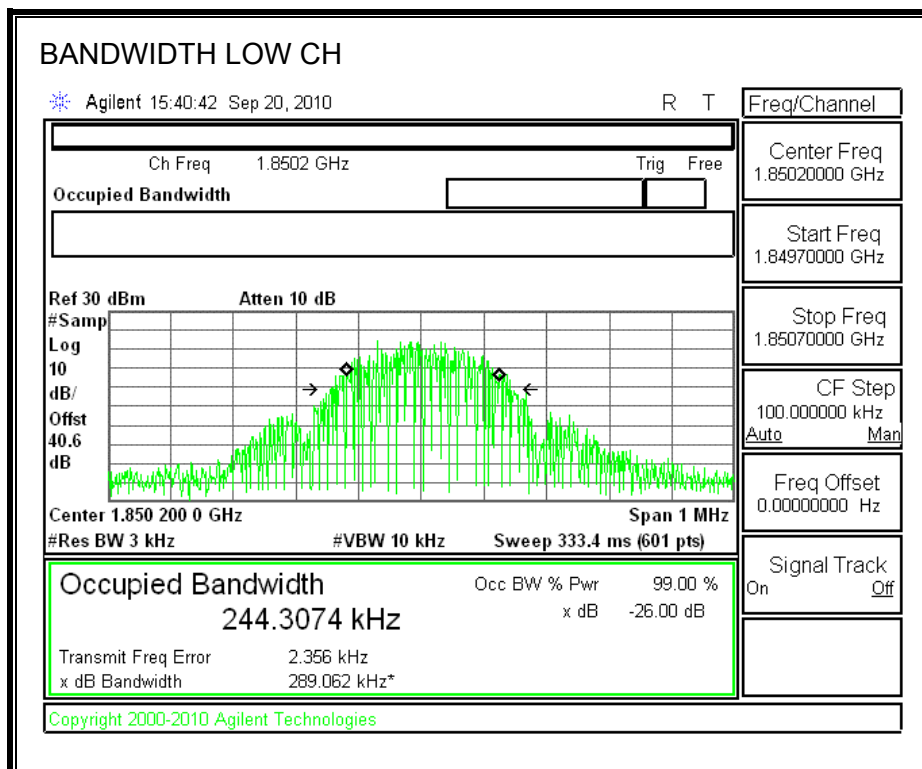


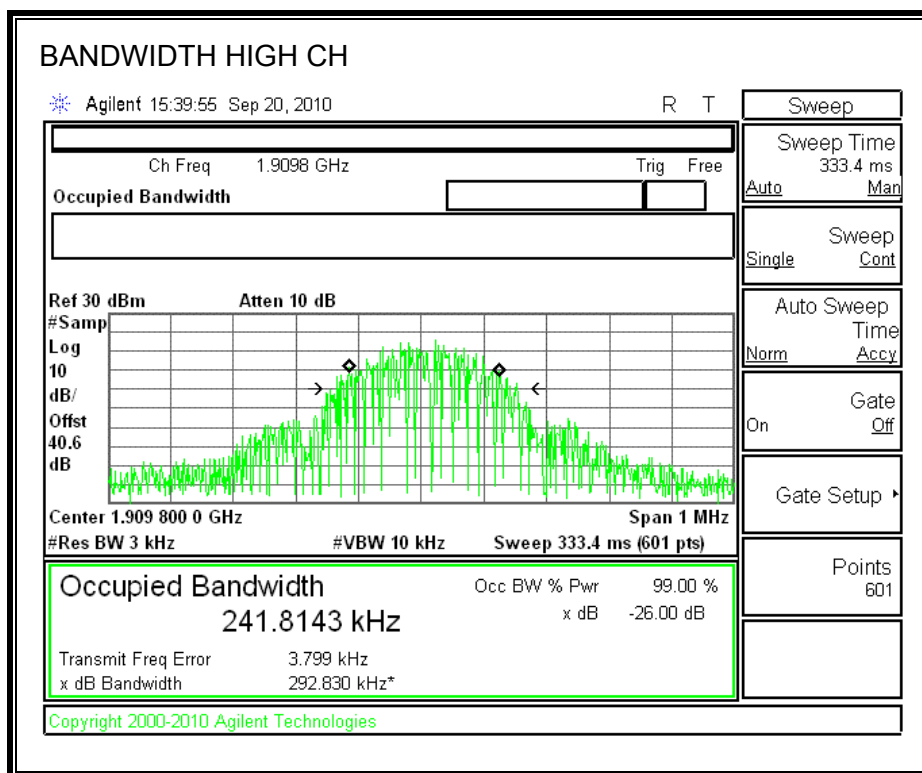
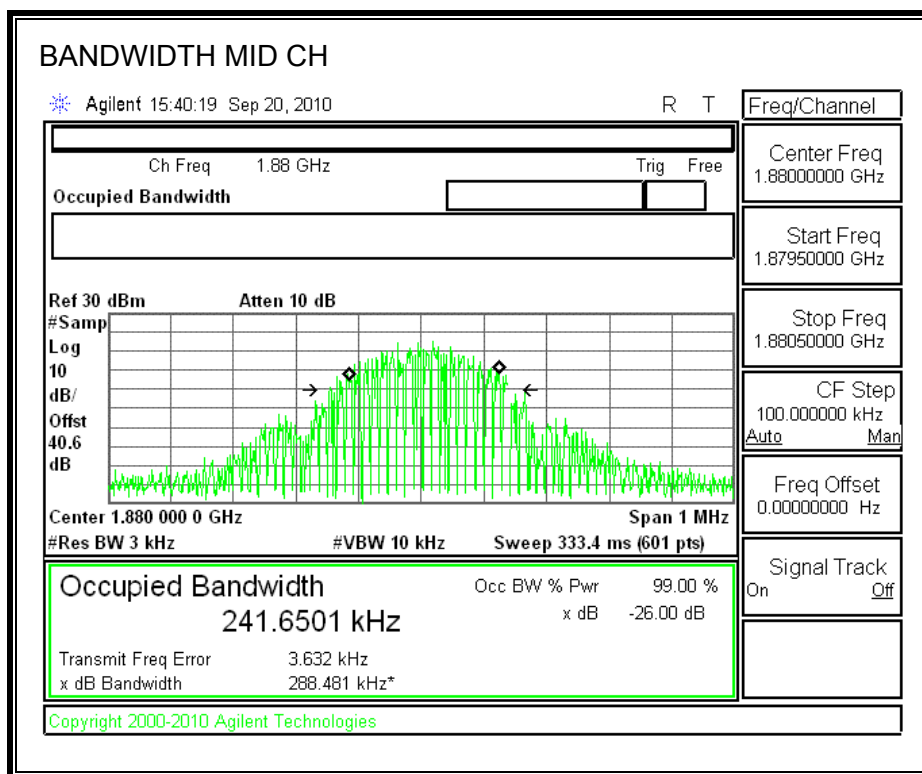
PCS, GPRS1900 BANDWIDTH



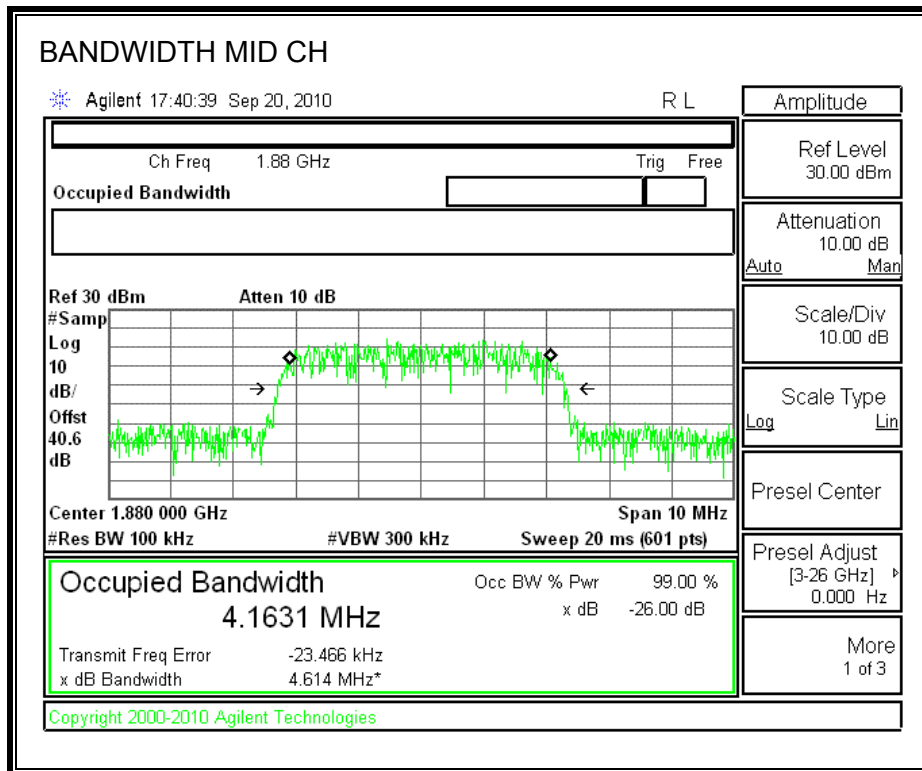
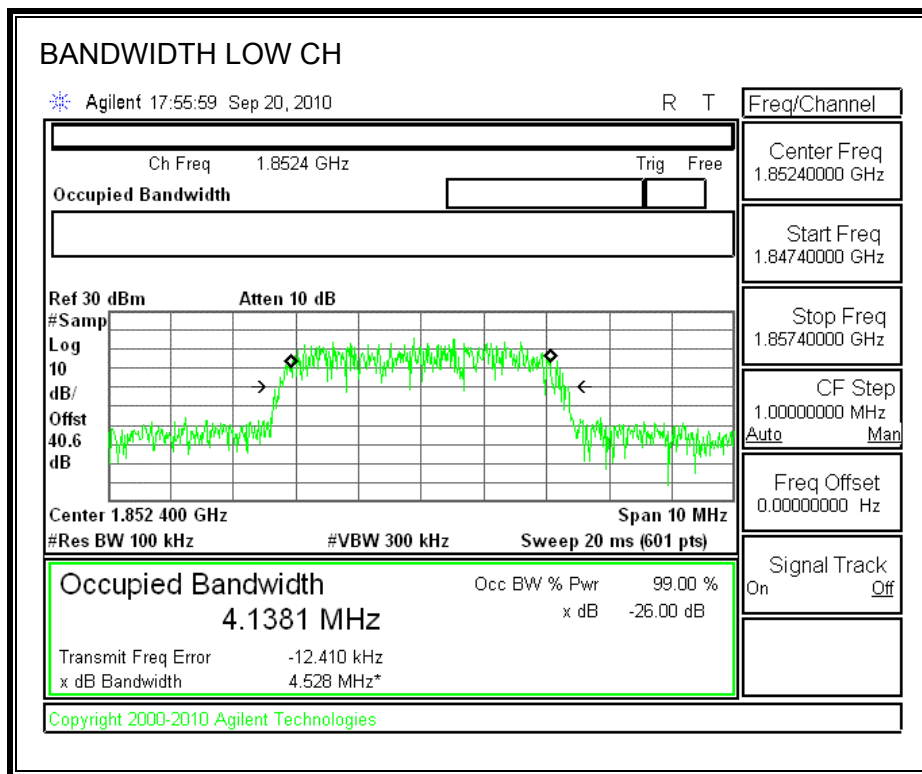


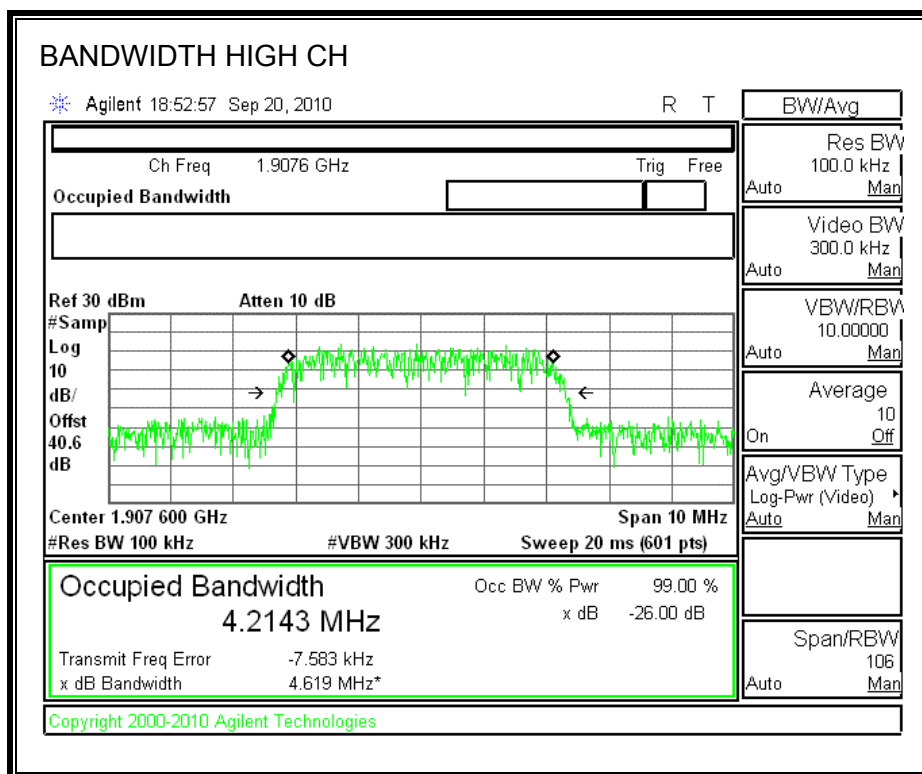
PCS, EGPRS1900 BANDWIDTH



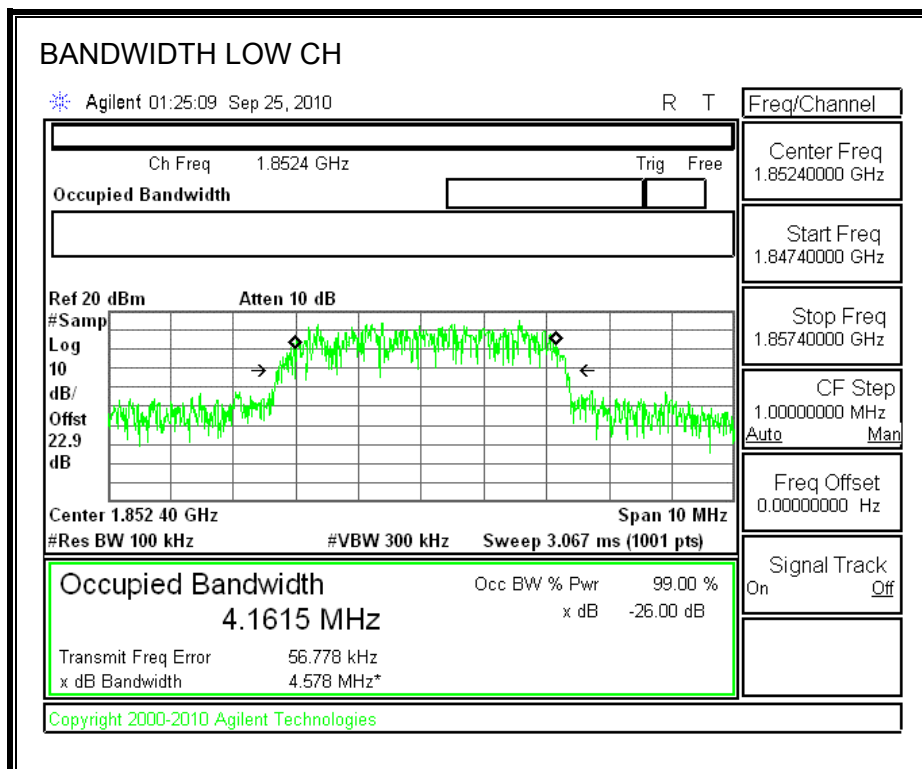


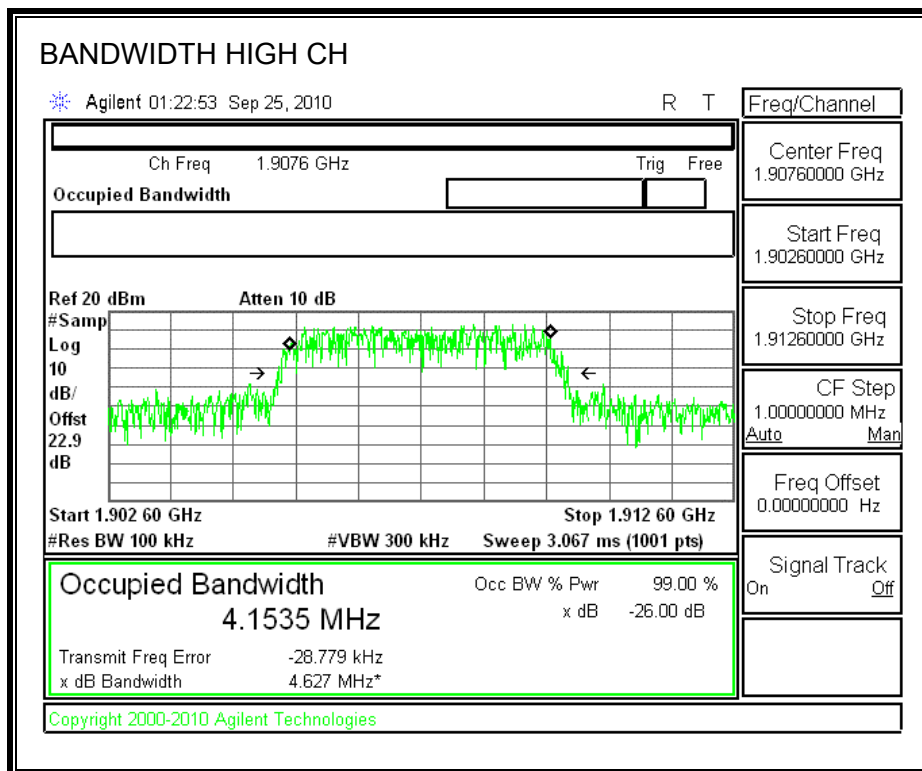
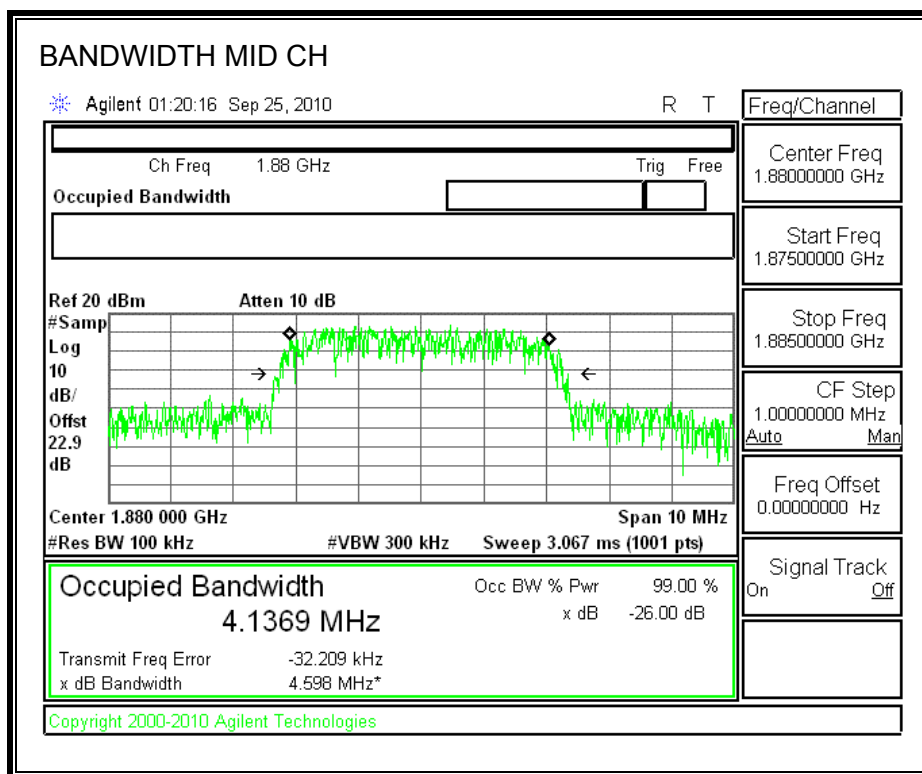
CELL, UMTS REL 99 BANDWIDTH





CELL, UMTS HSDPA BANDWIDTH





7.3. SPURIOUS EMISSION SPURIOUS EMISSION AT ANTENNA TERMINAL

LIMIT

§22.917 (e) and §24.238 (a), 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 (h)

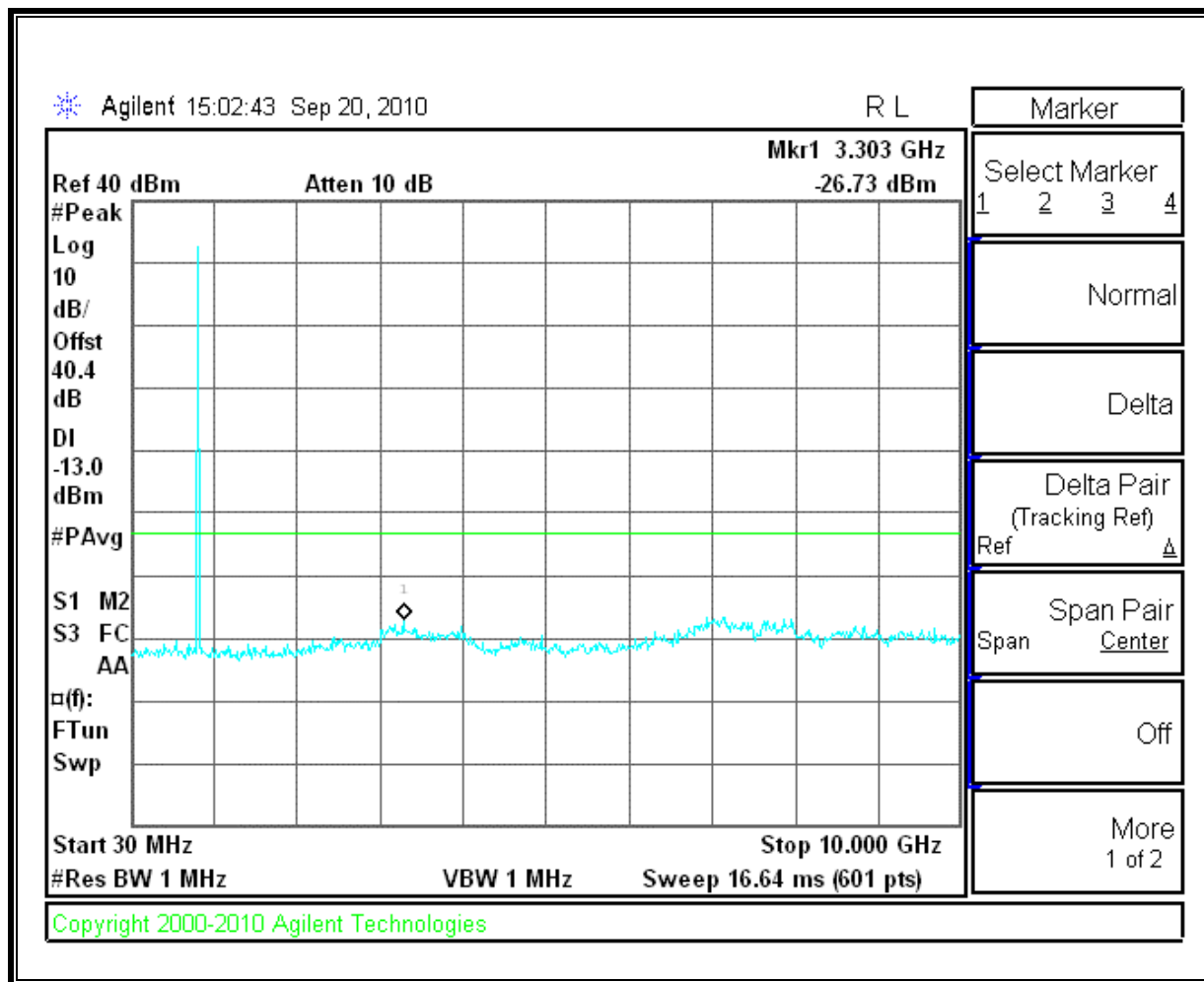
MODES TESTED

- GSM - GSM (GSMK) & EGPRS (8PSK)
- UMTS – REL 99 & HSDPA

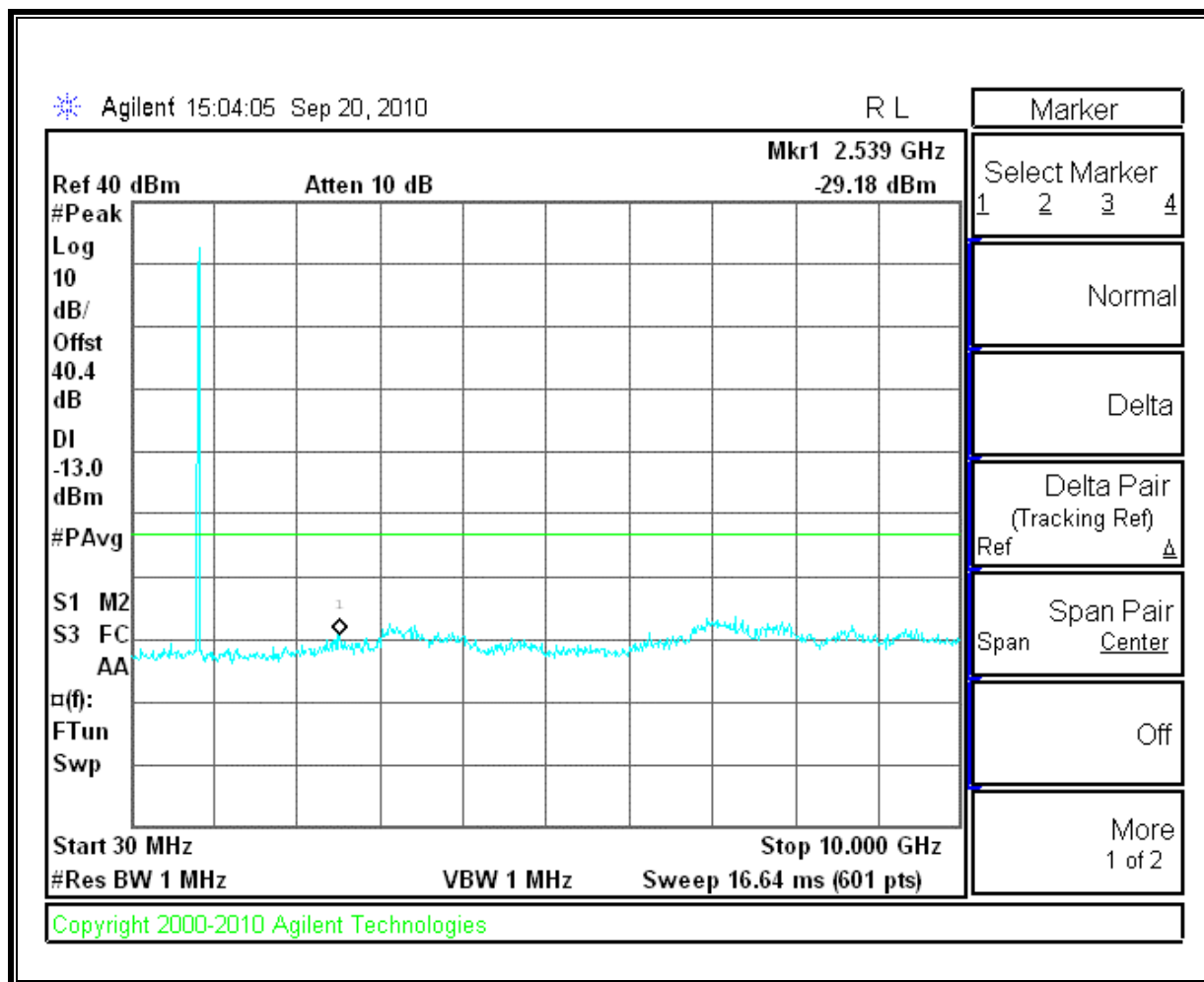
RESULTS

CELL, GSM850 MODULATION:

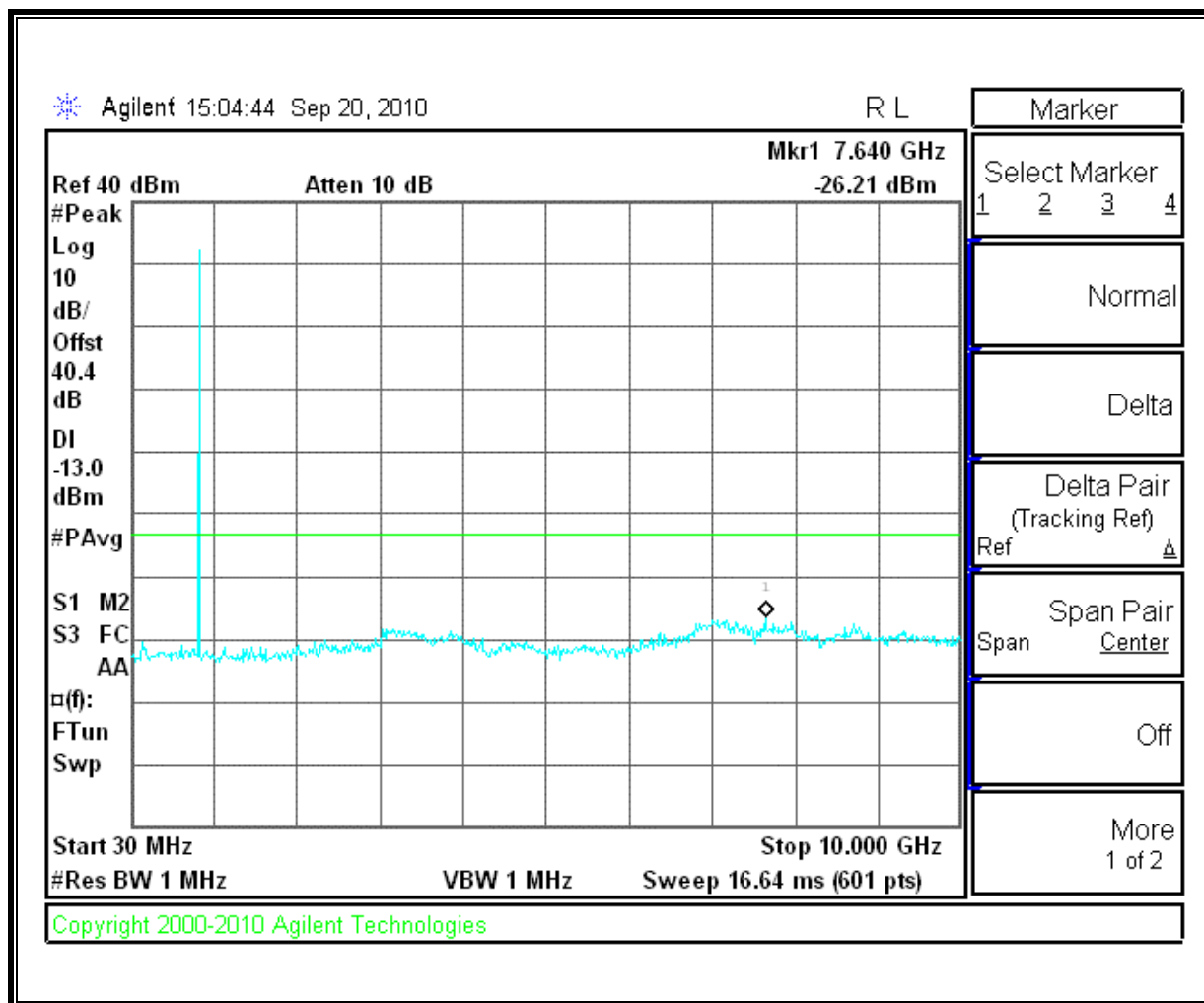
Low Channel, Out-Of-Band Emissions



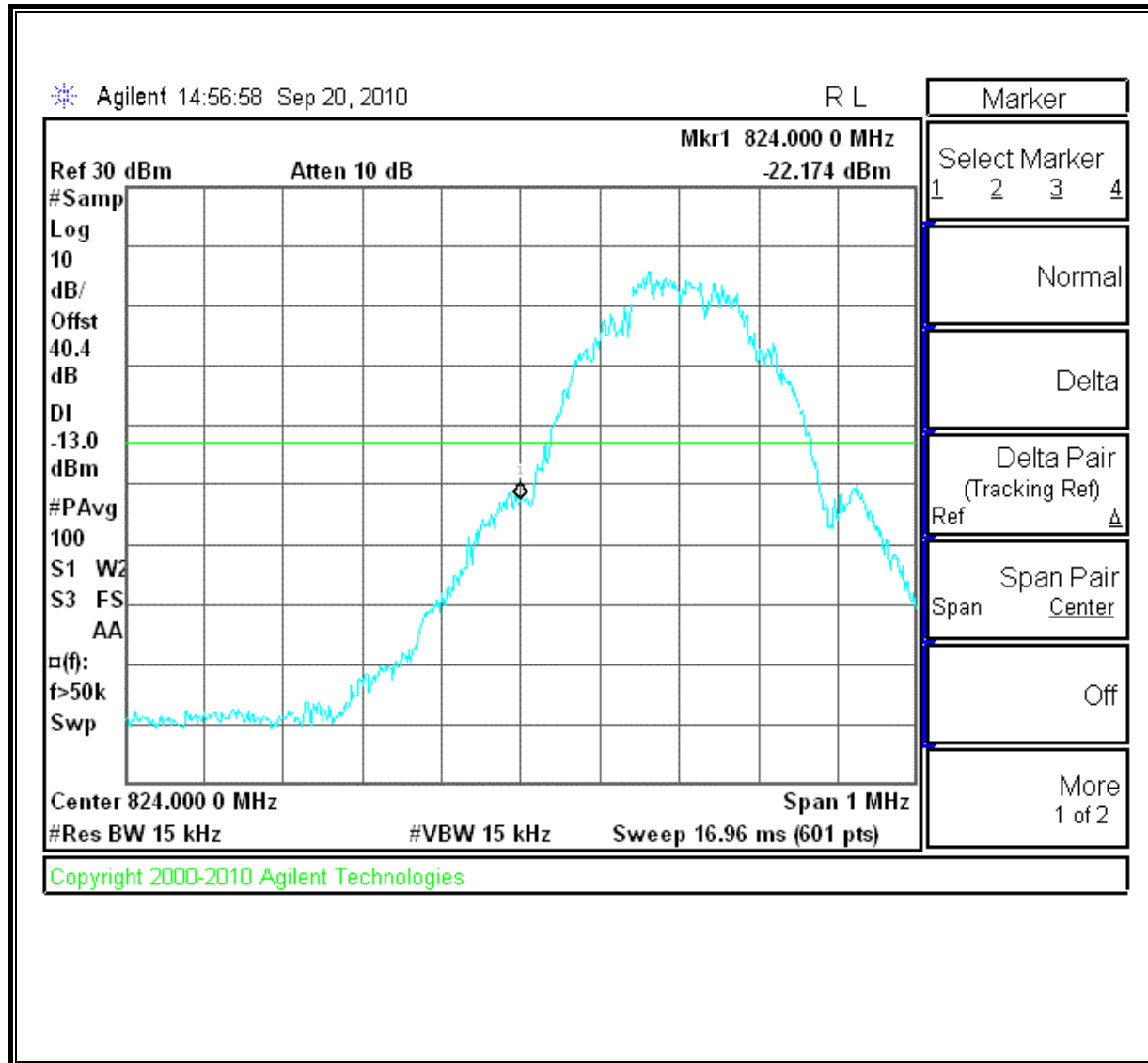
Mid Channel, Out-Of-Band Emissions



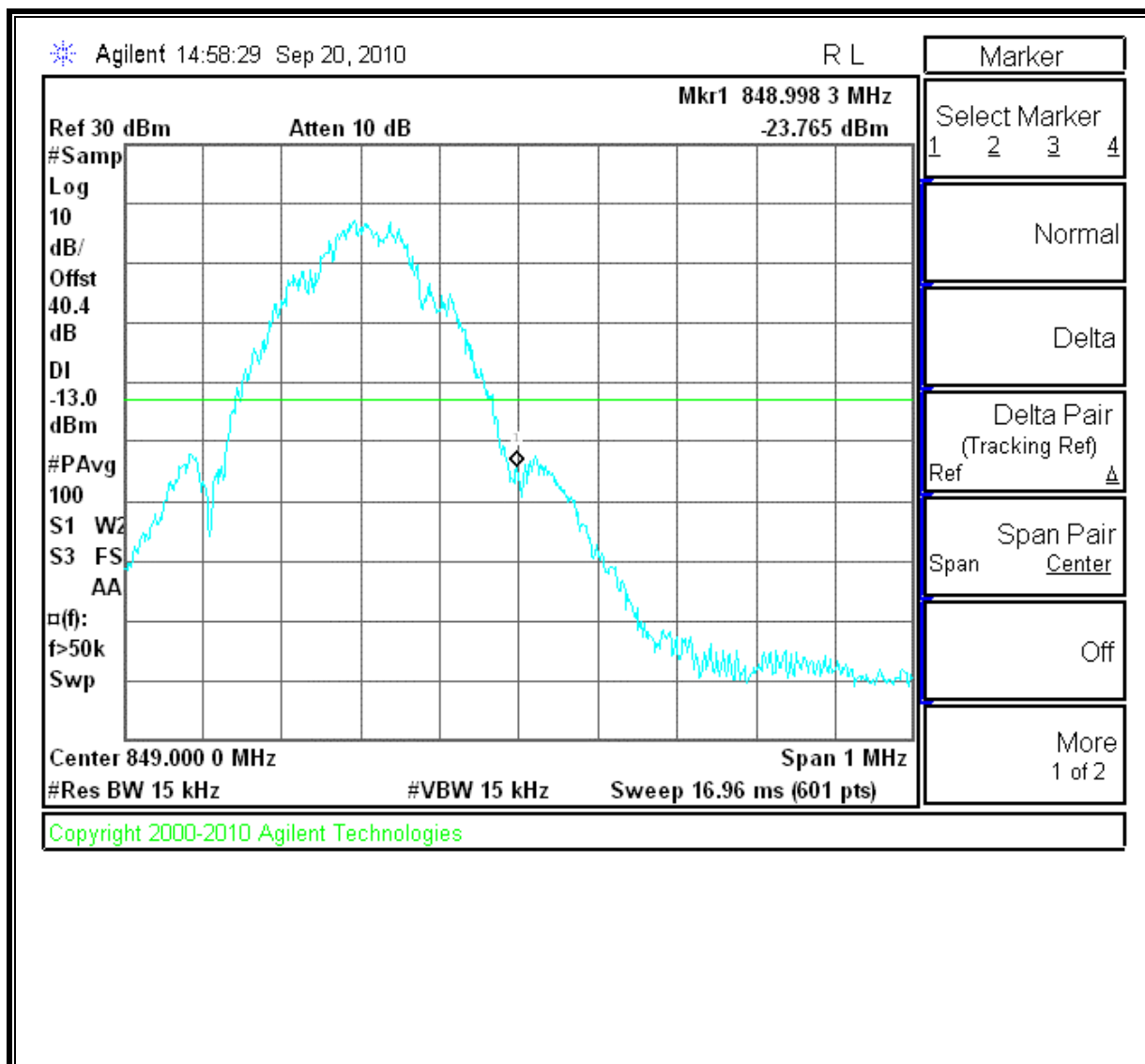
High Channel, Out-Of-Band Emissions



Low Channel Band Edge

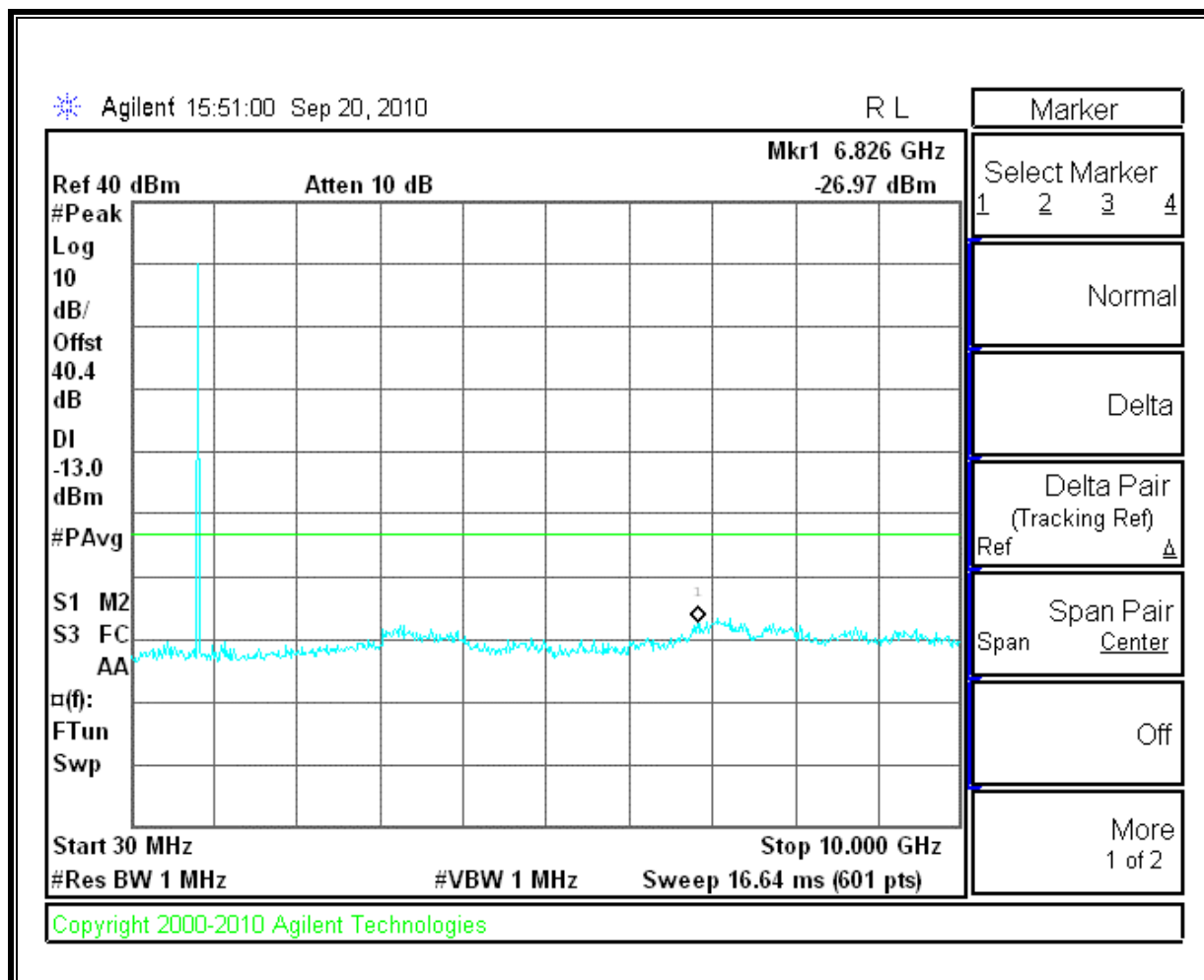


High Channel Band Edge

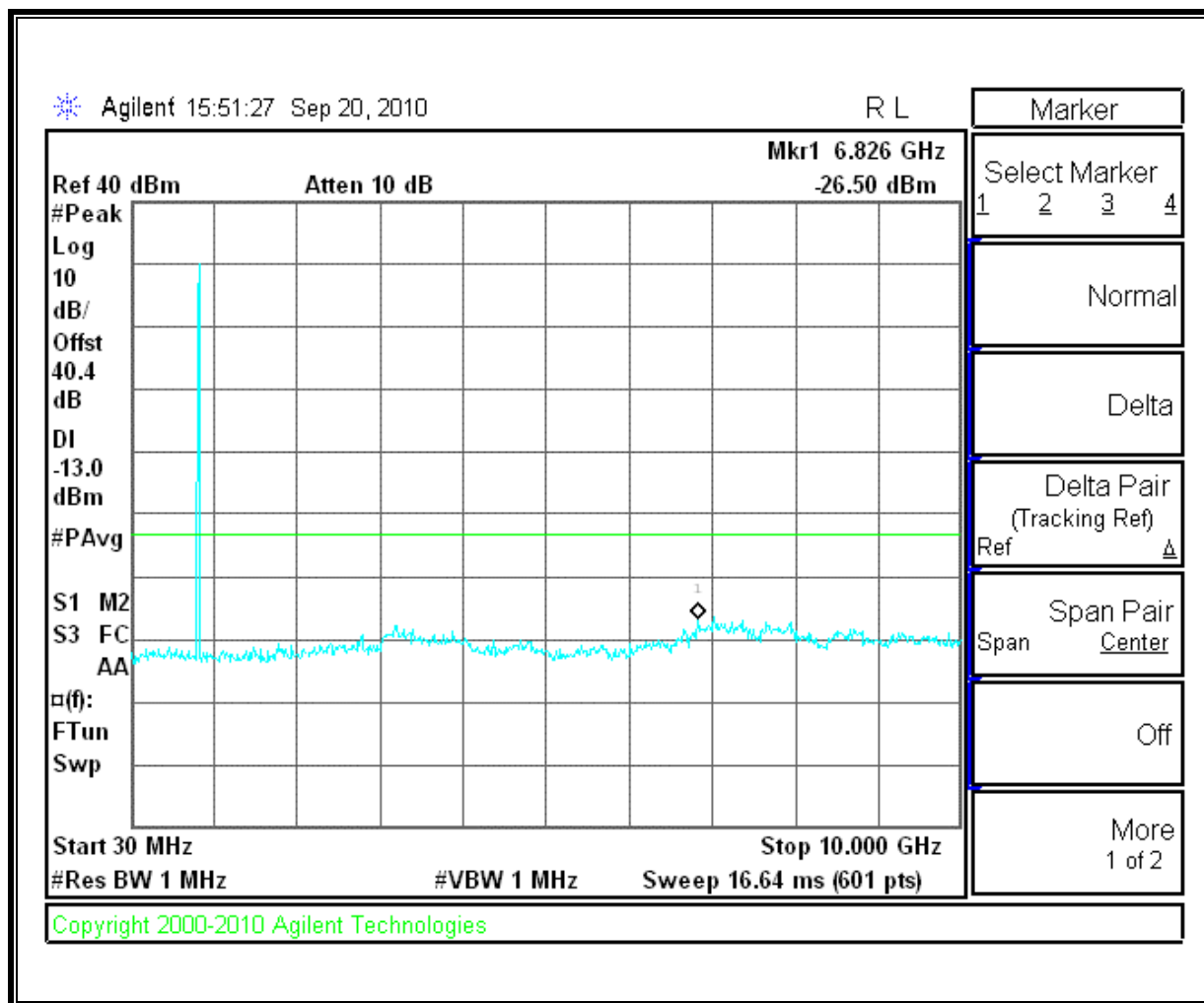


CELL, EGPRS MODULATION:

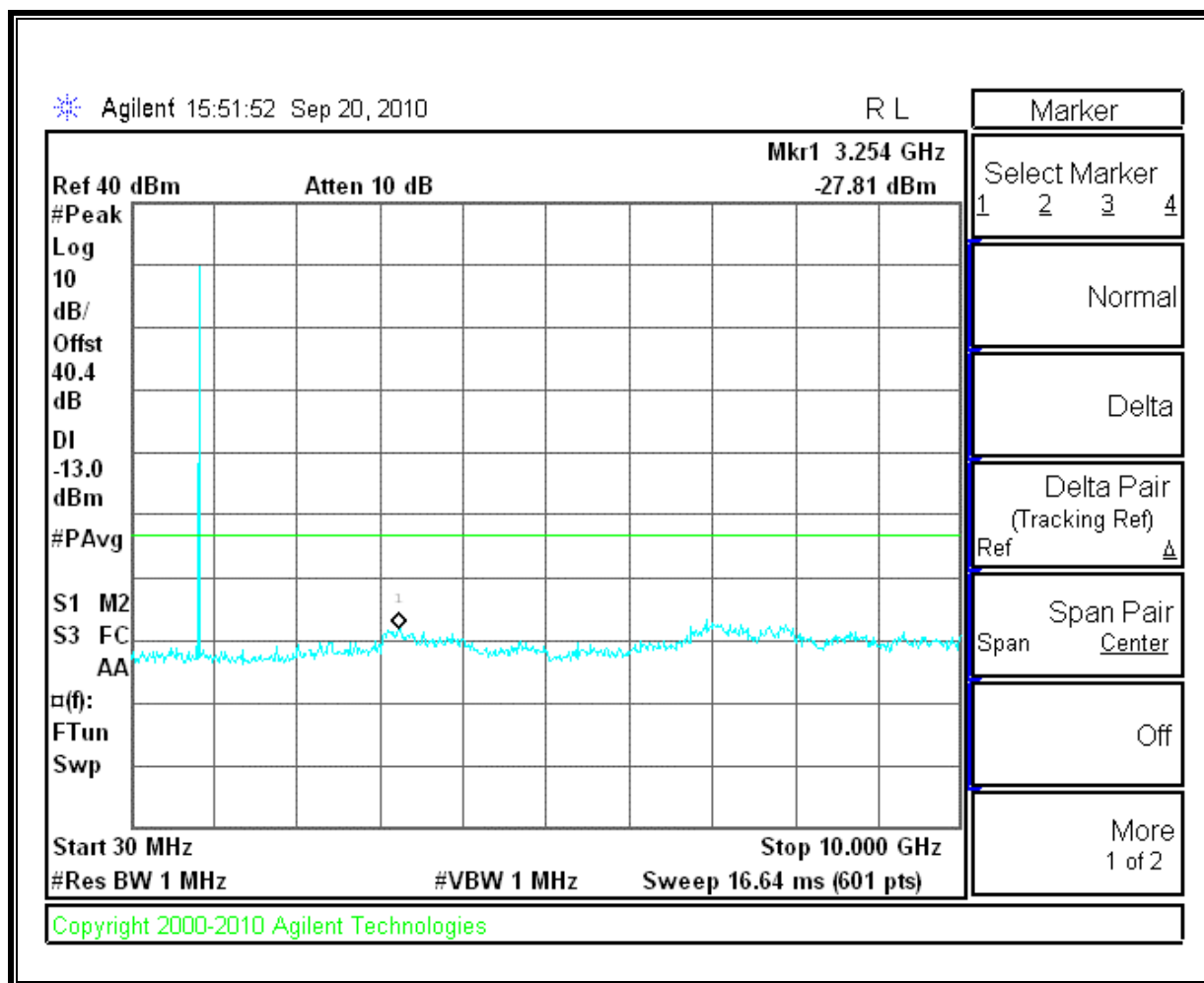
Low Channel, Out-Of-Band Emissions



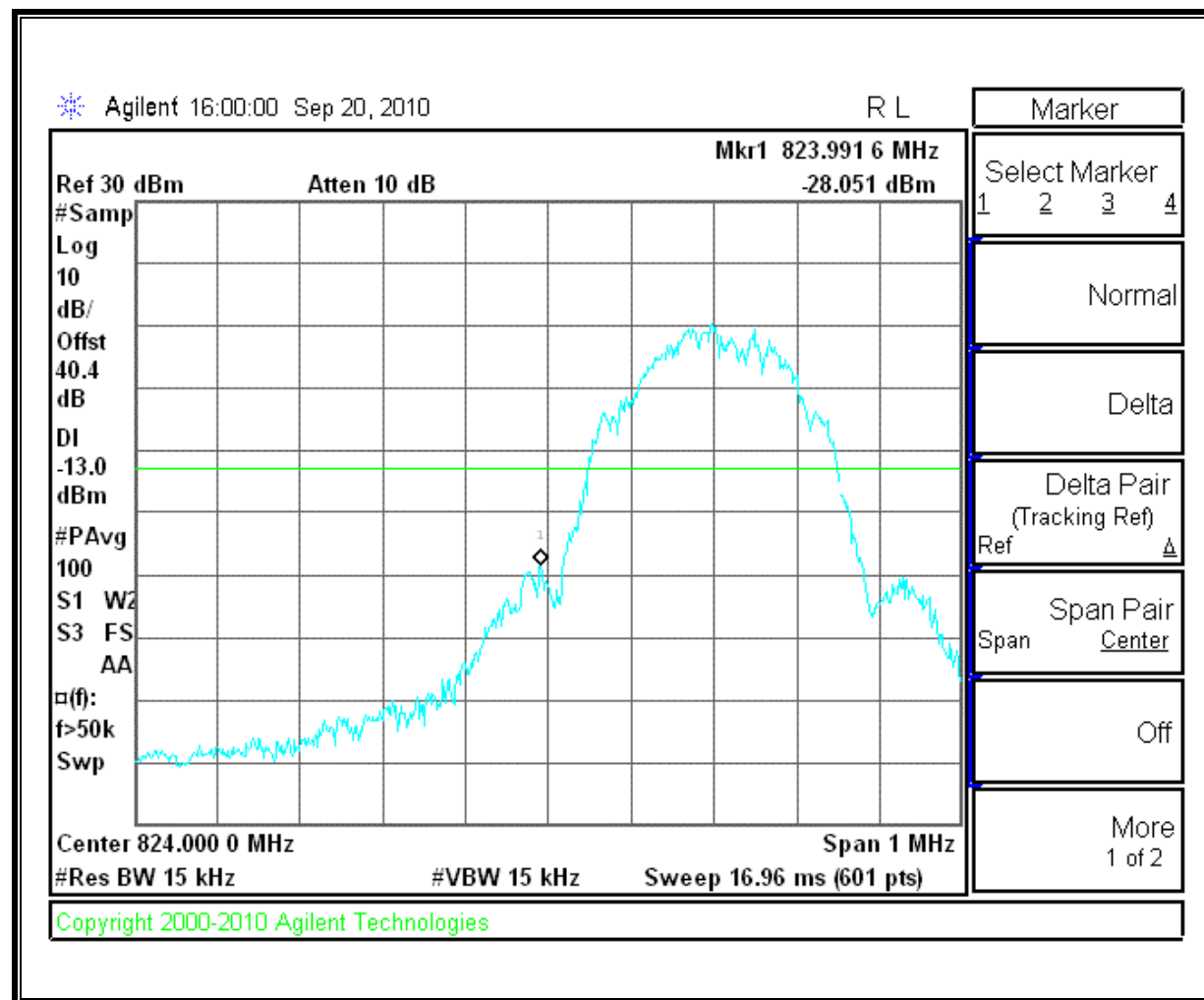
Mid Channel, Out-Of-Band Emissions



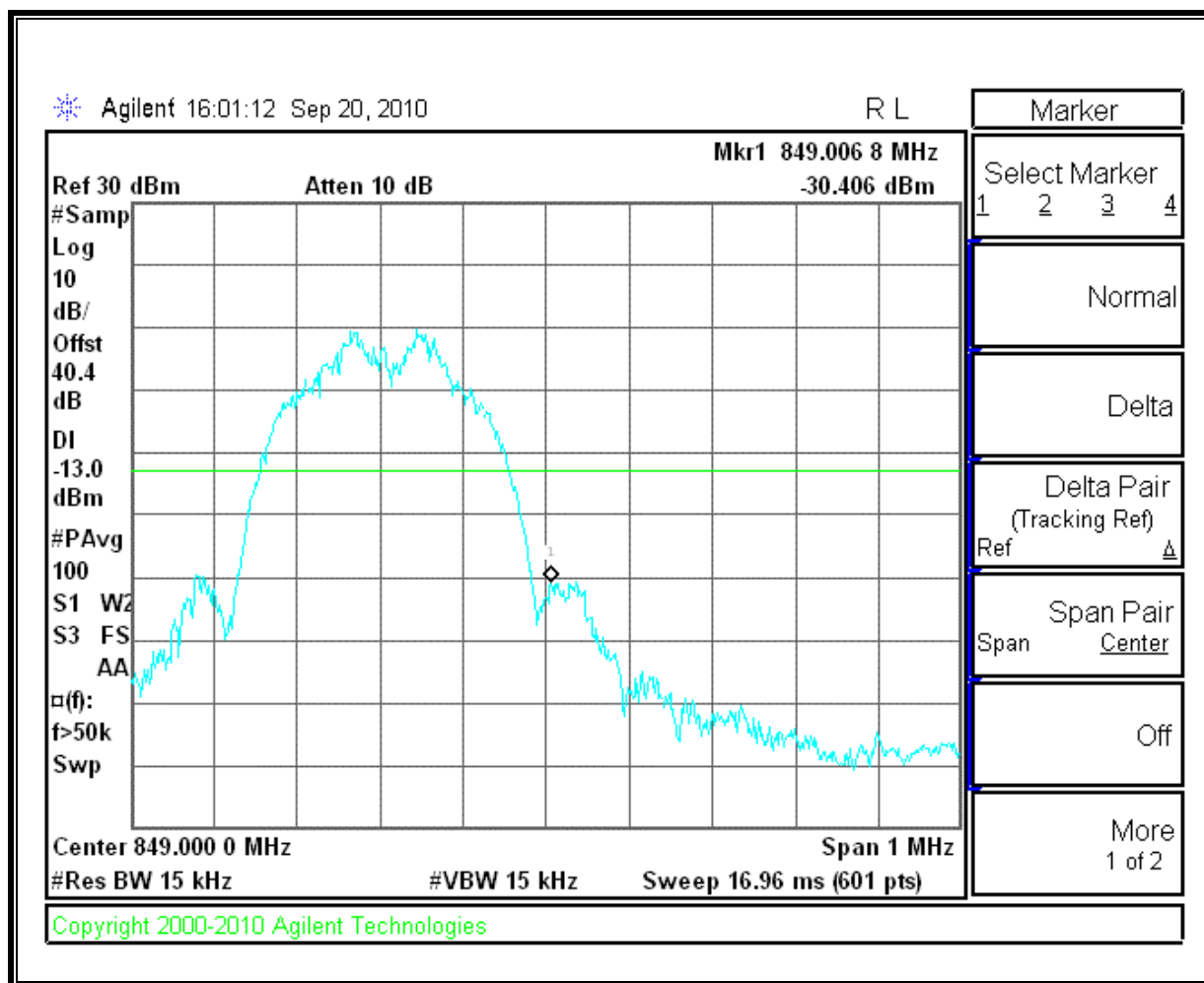
High Channel, Out-Of-Band Emissions



Low Channel Band Edge

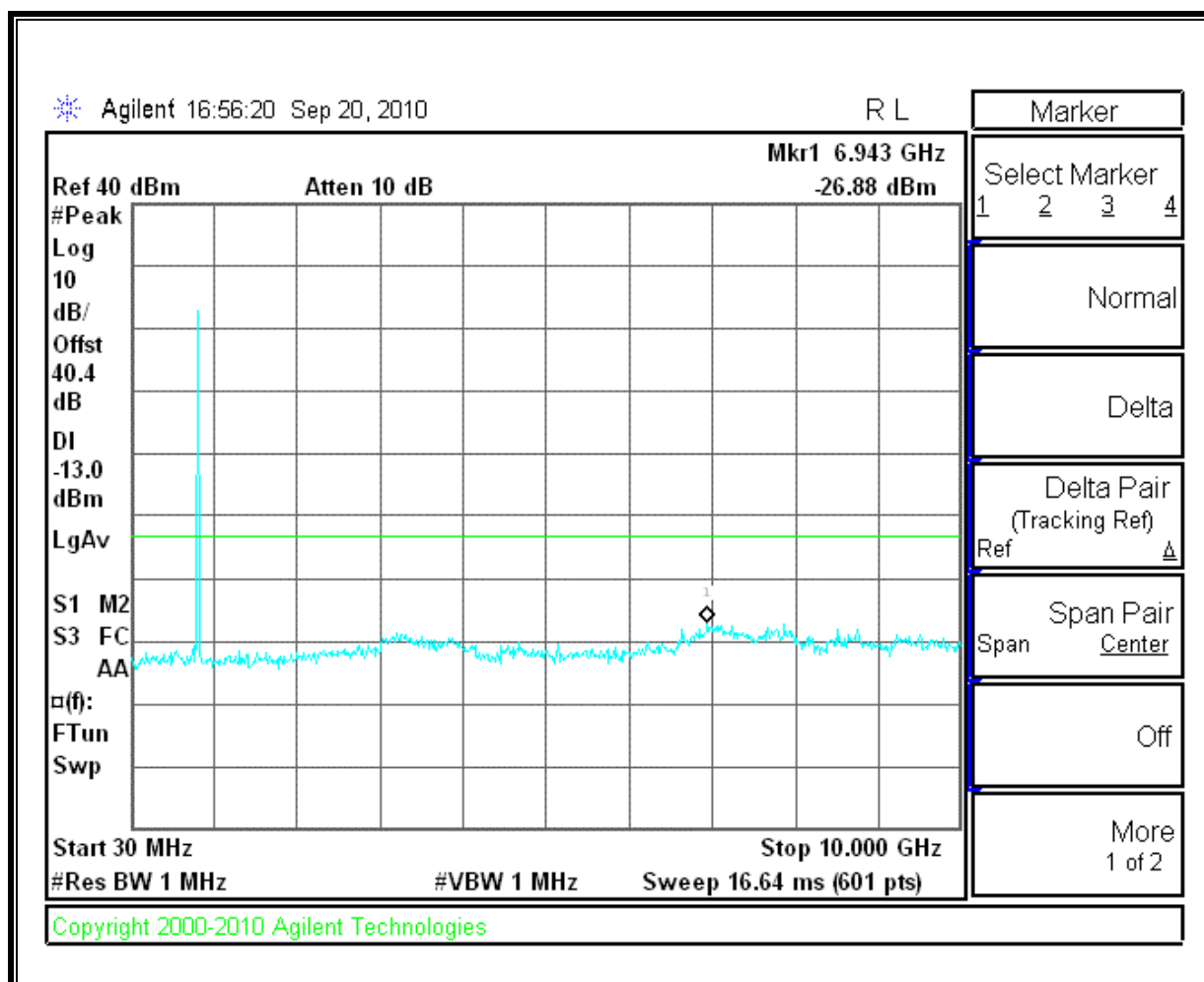


High Channel Band Edge

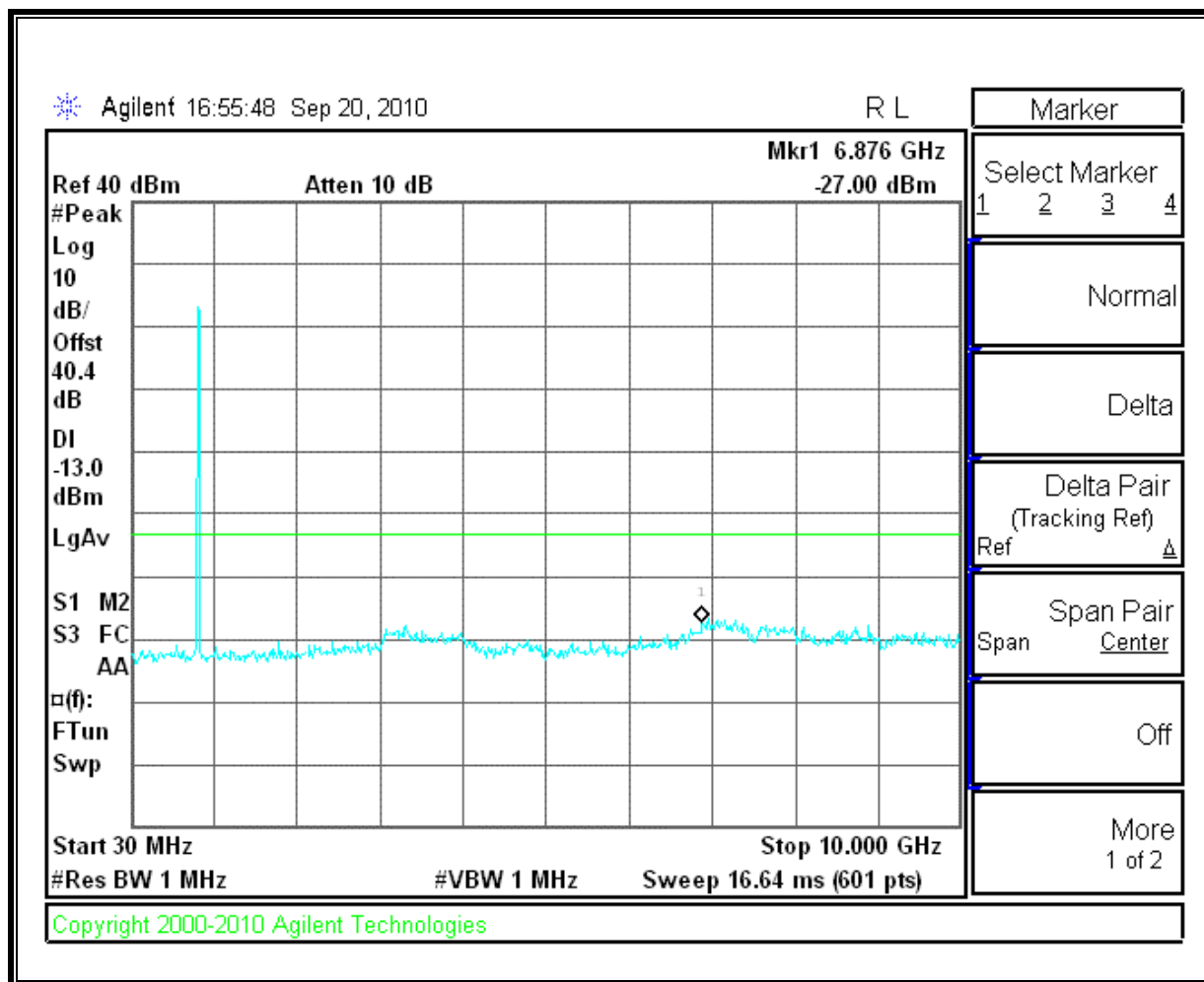


CELL, UMTS REL 99 MODULATION:

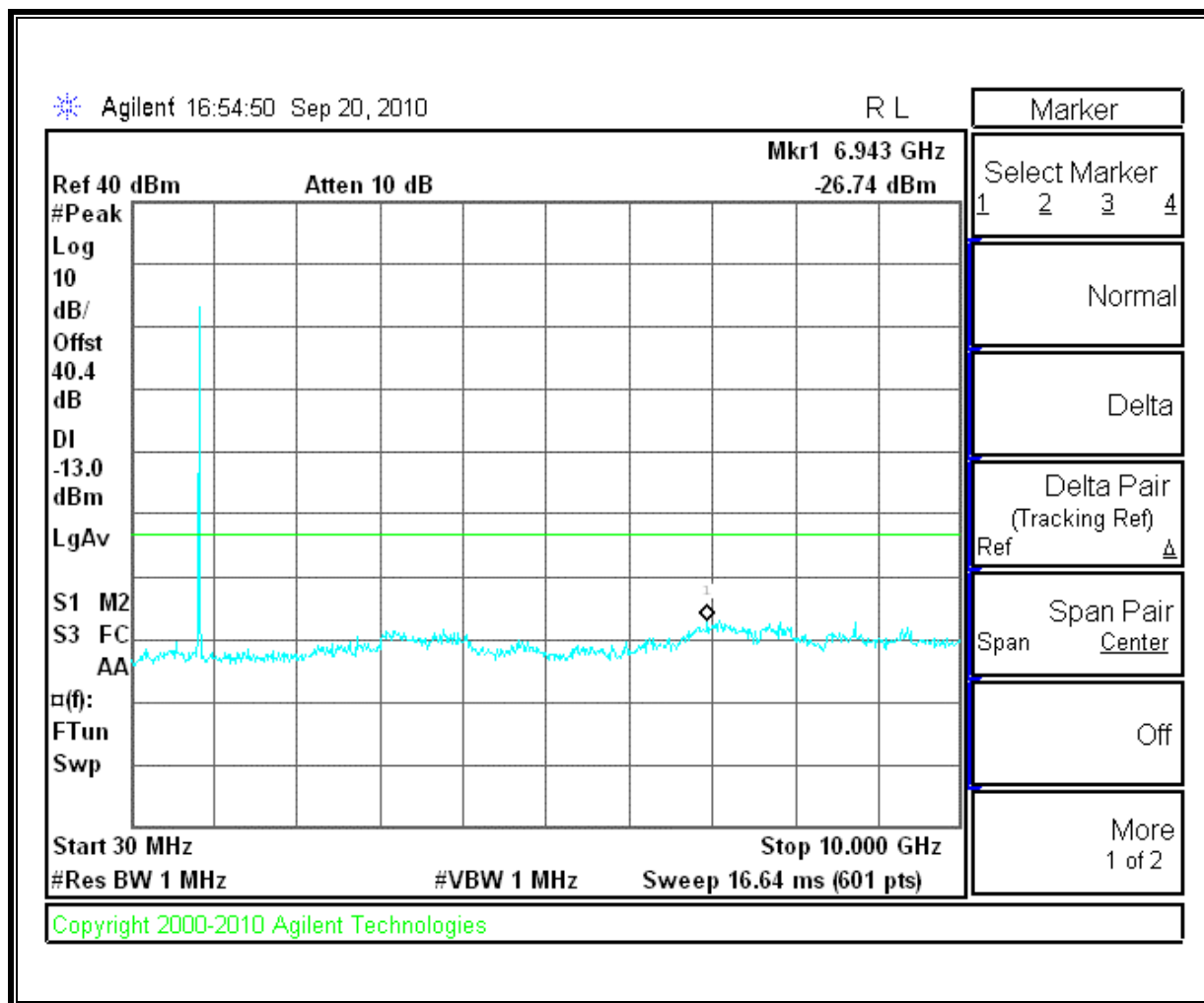
Low Channel, Out-Of-Band Emissions



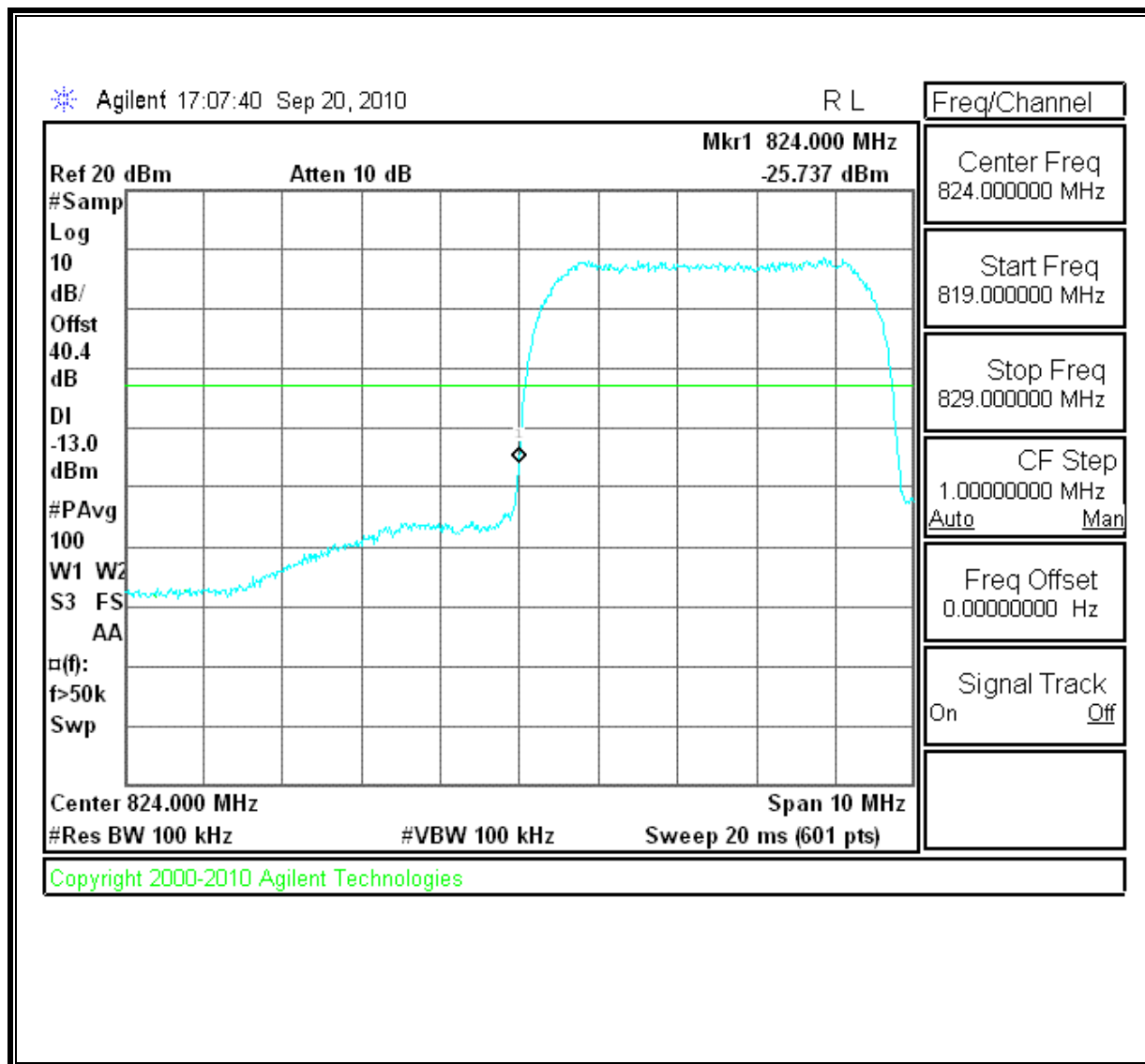
Mid Channel, Out-Of-Band Emissions



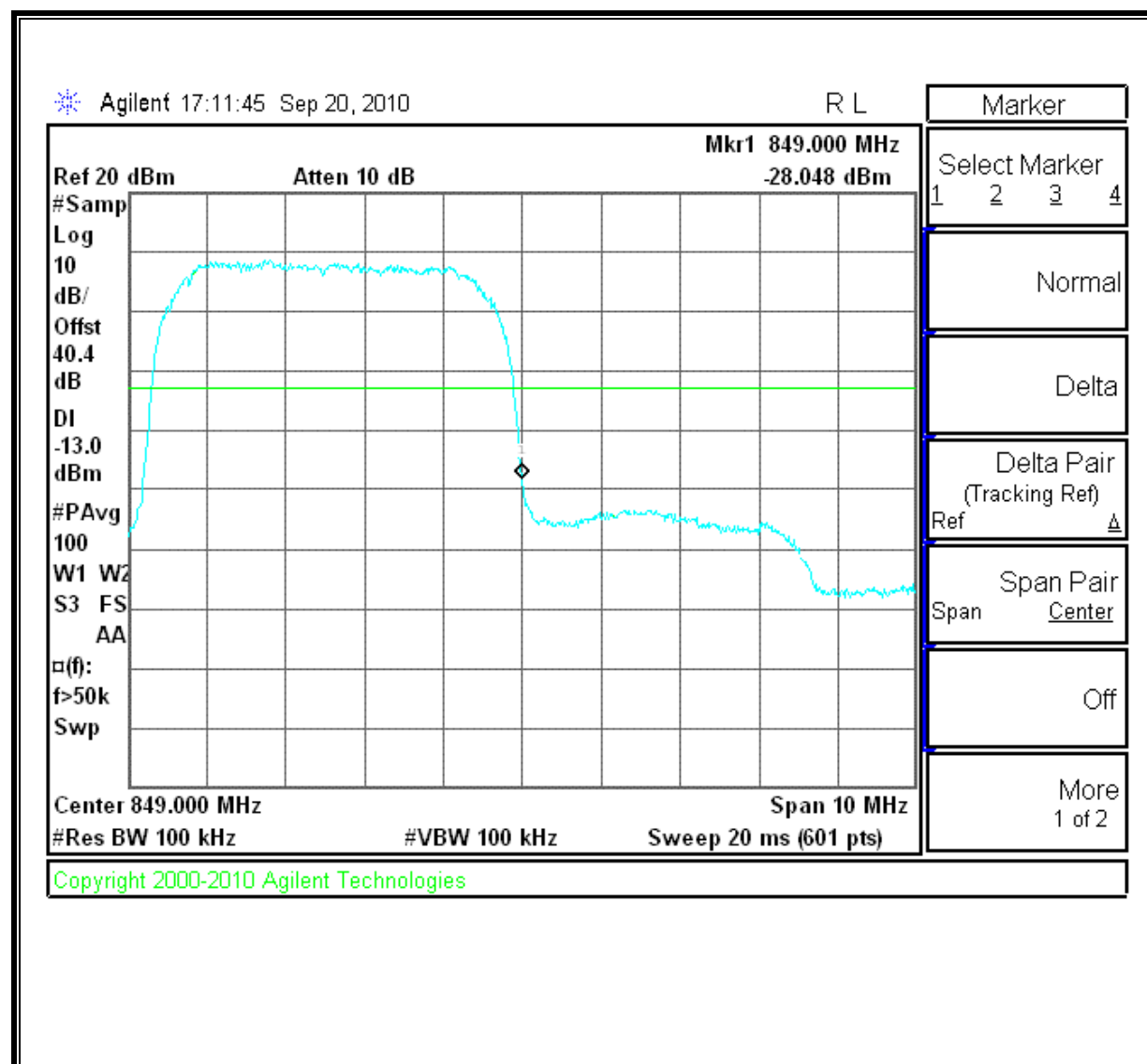
High Channel, Out-Of-Band Emissions



Low Channel Band Edge

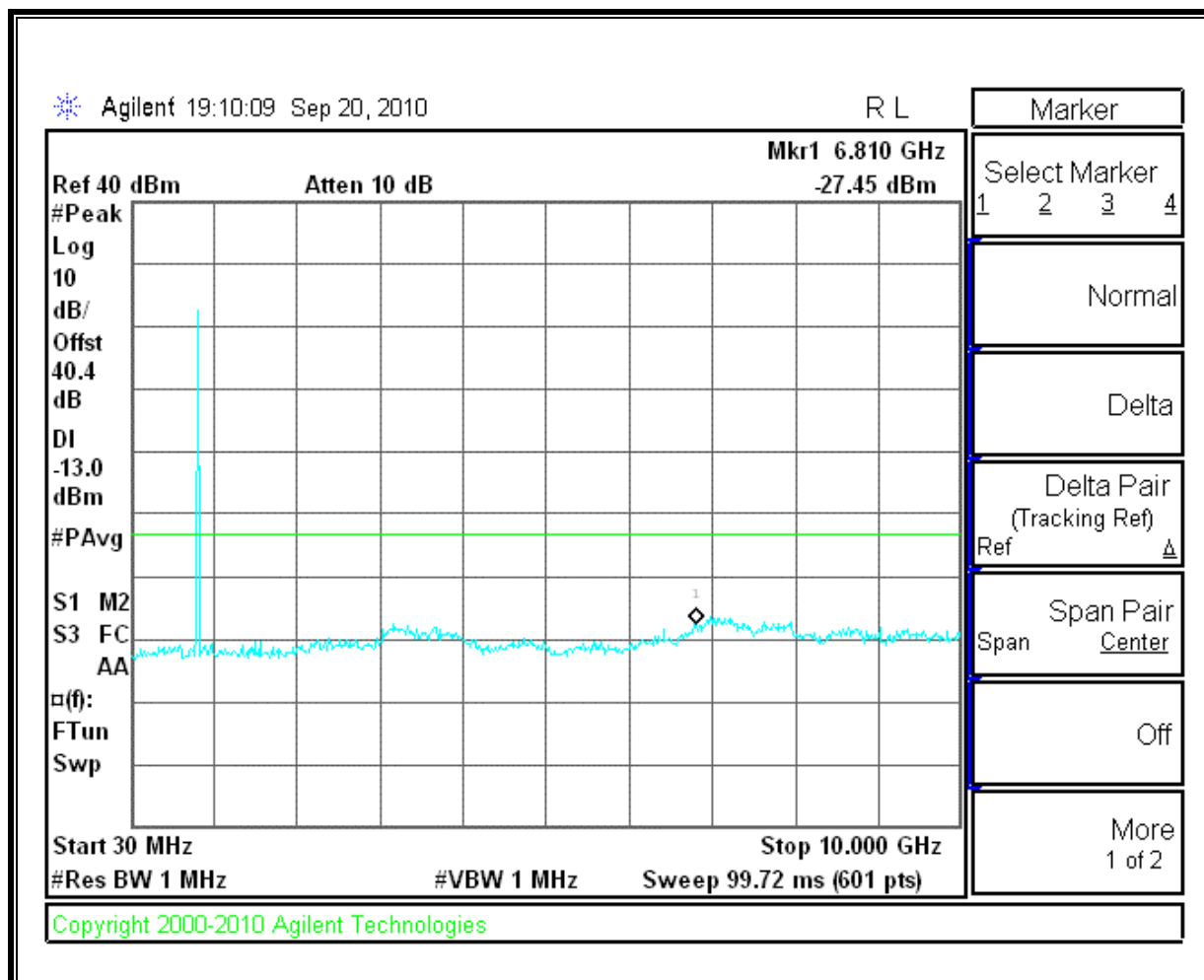


High Channel Band Edge

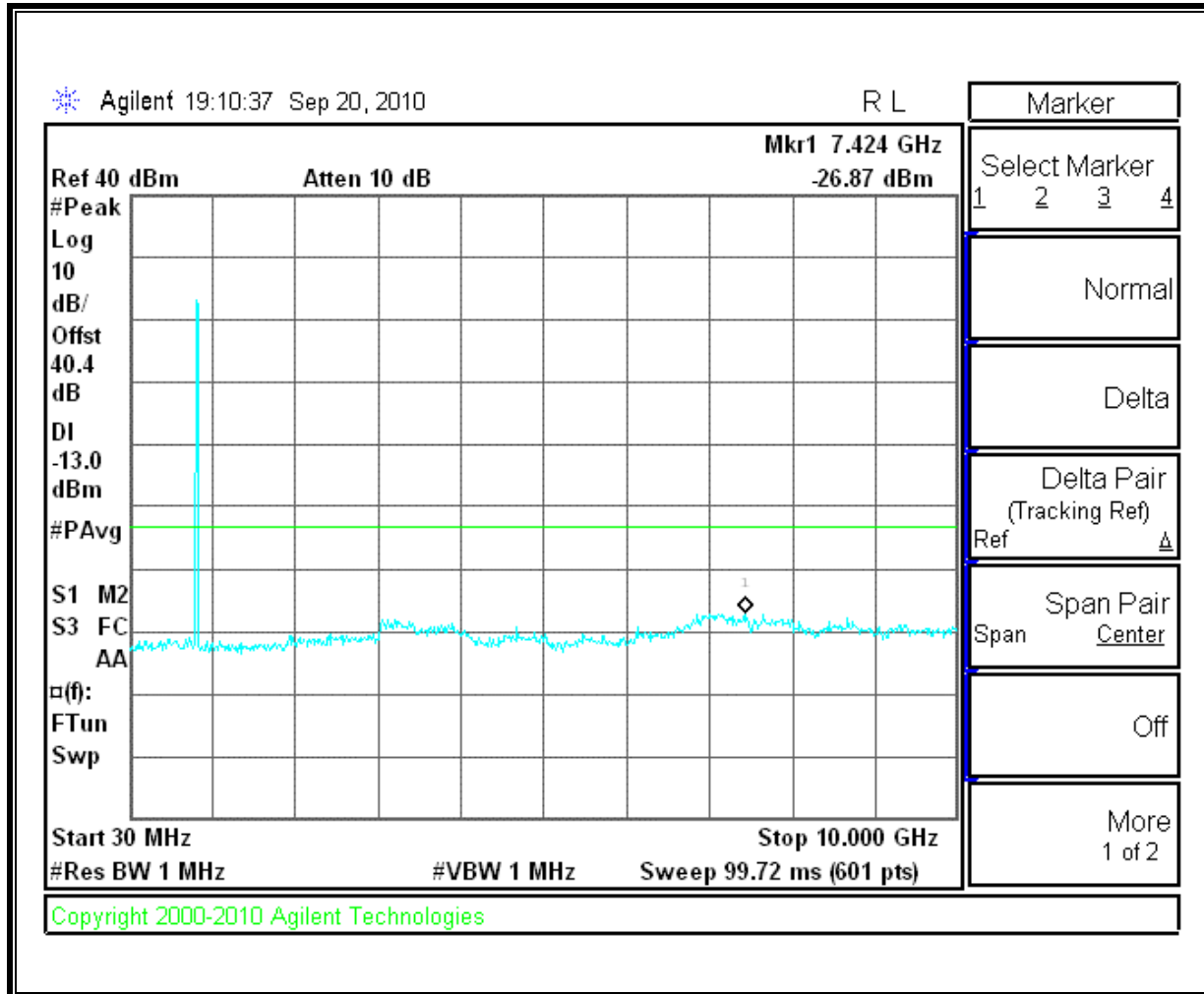


CELL, UMTS HSDPA MODULATION:

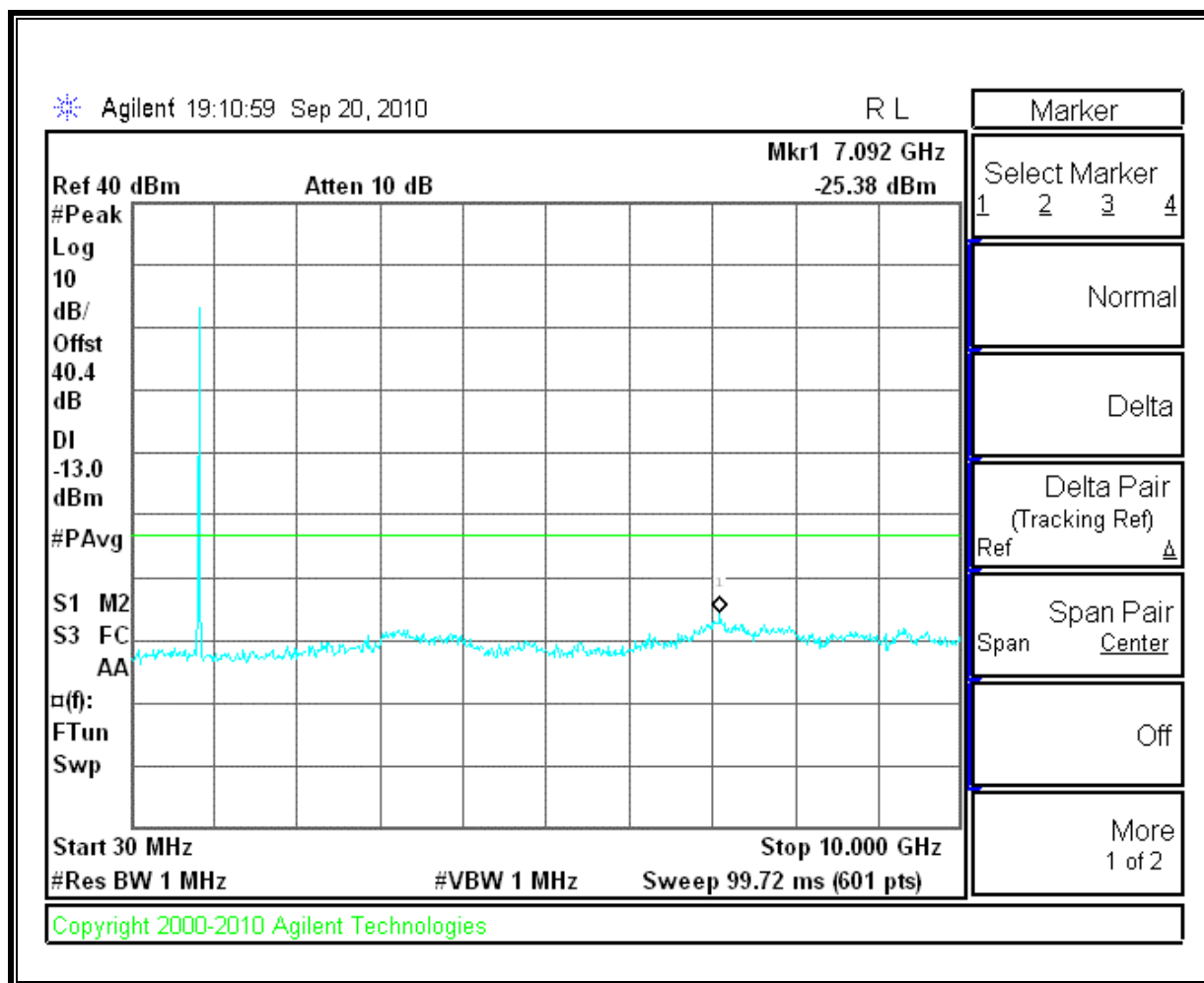
Low Channel, Out-Of-Band Emissions



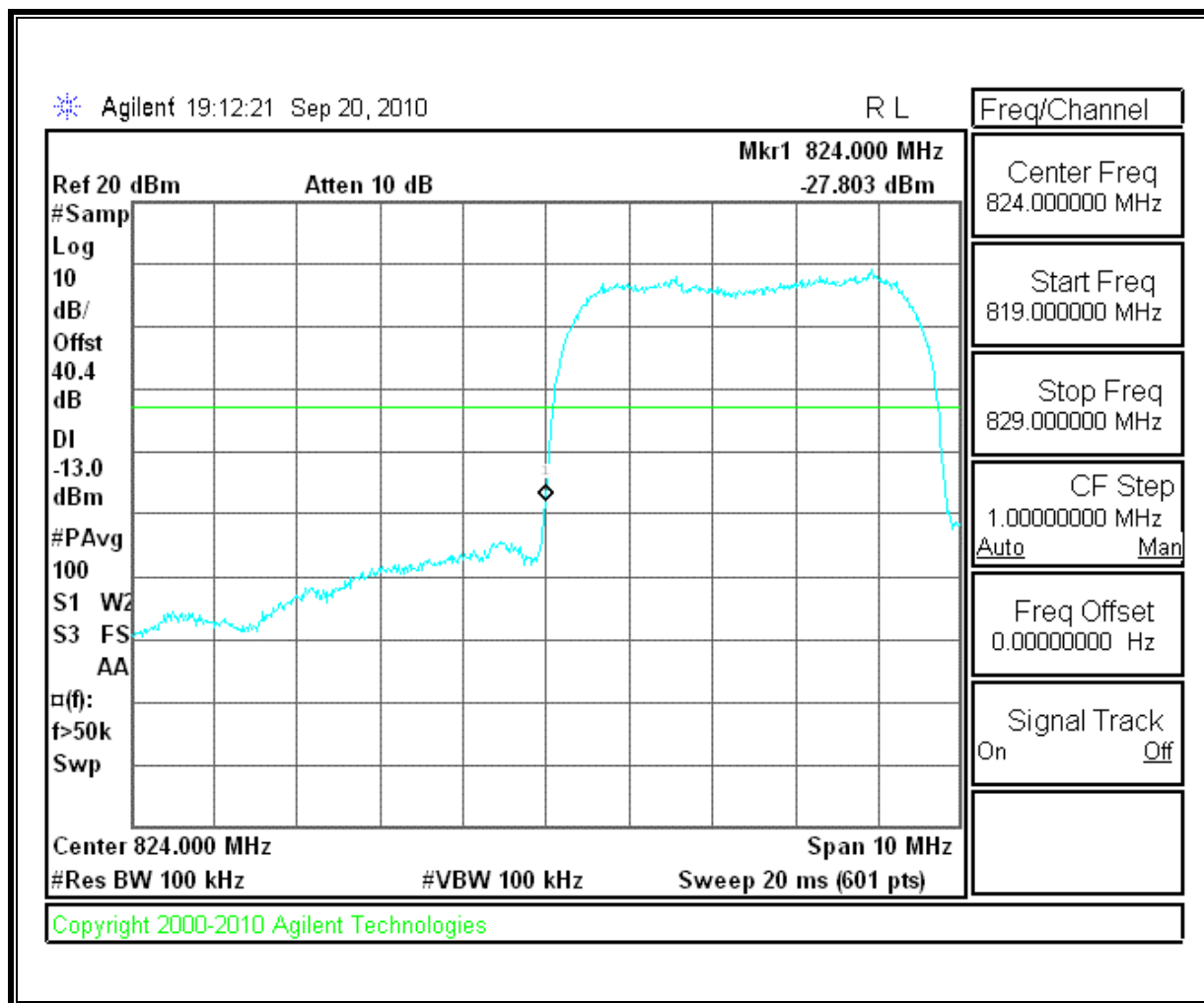
Mid Channel, Out-Of-Band Emissions



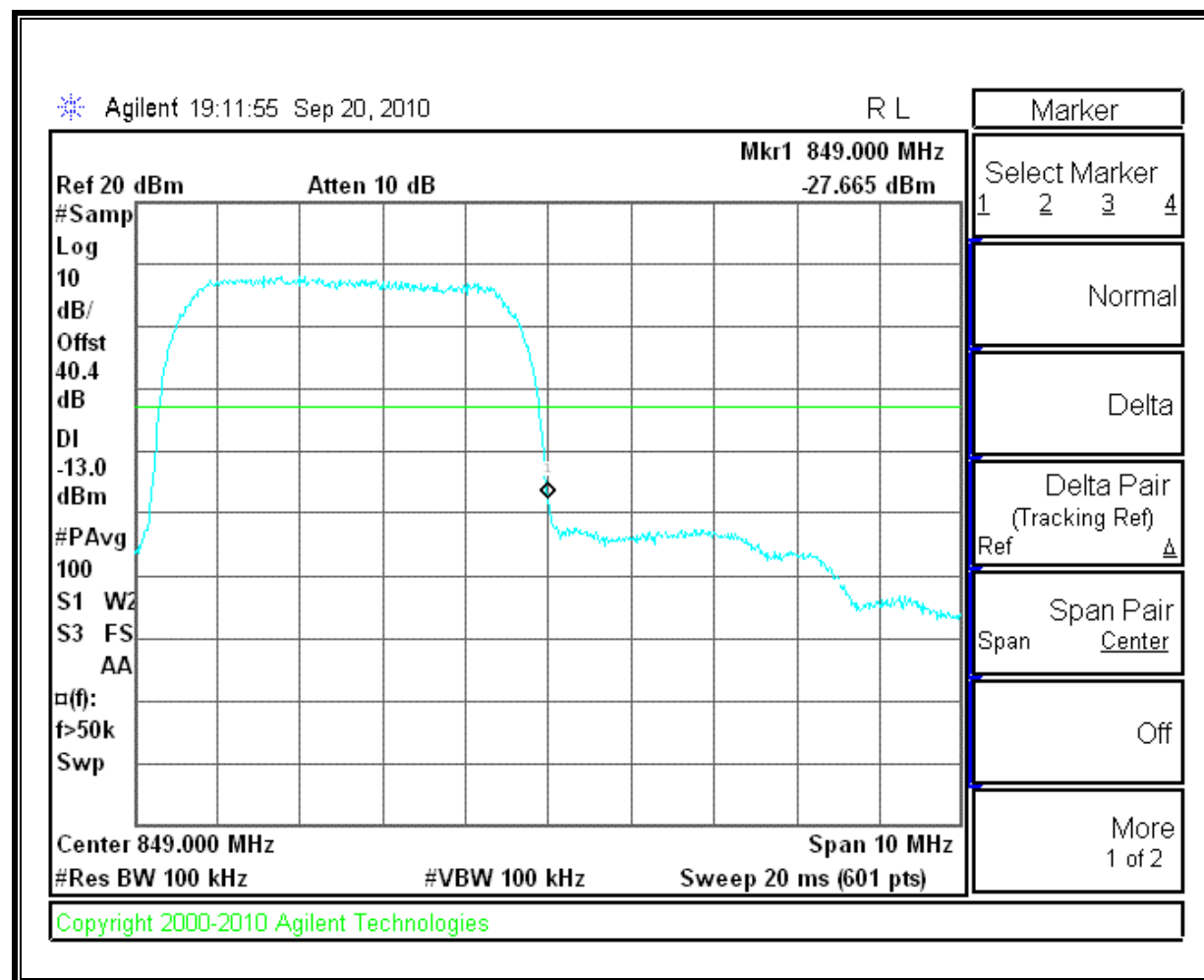
High Channel, Out-Of-Band Emissions



Low Channel Band Edge

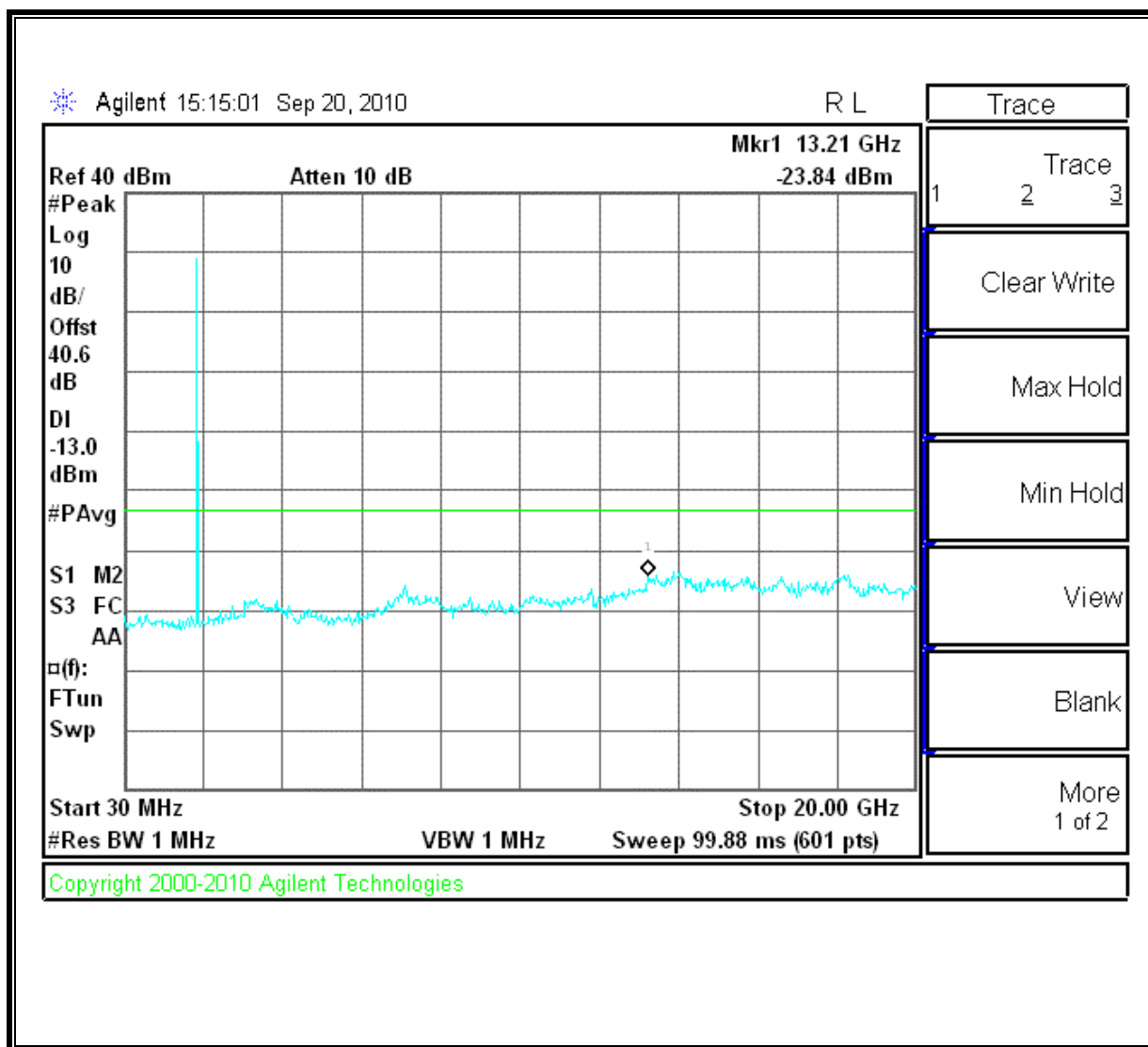


High Channel Band Edge

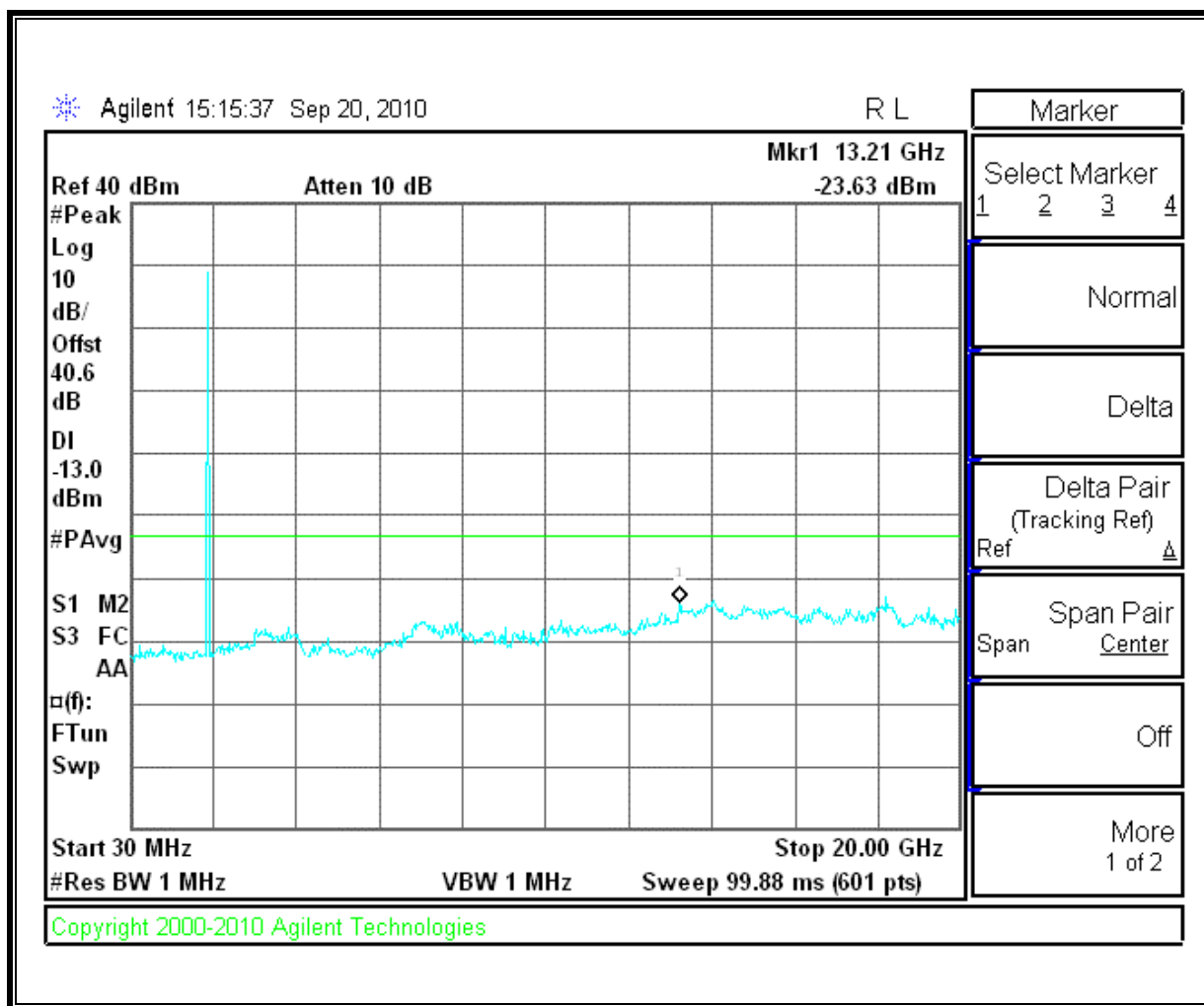


PCS GSM1900 MODULATION RESULTS

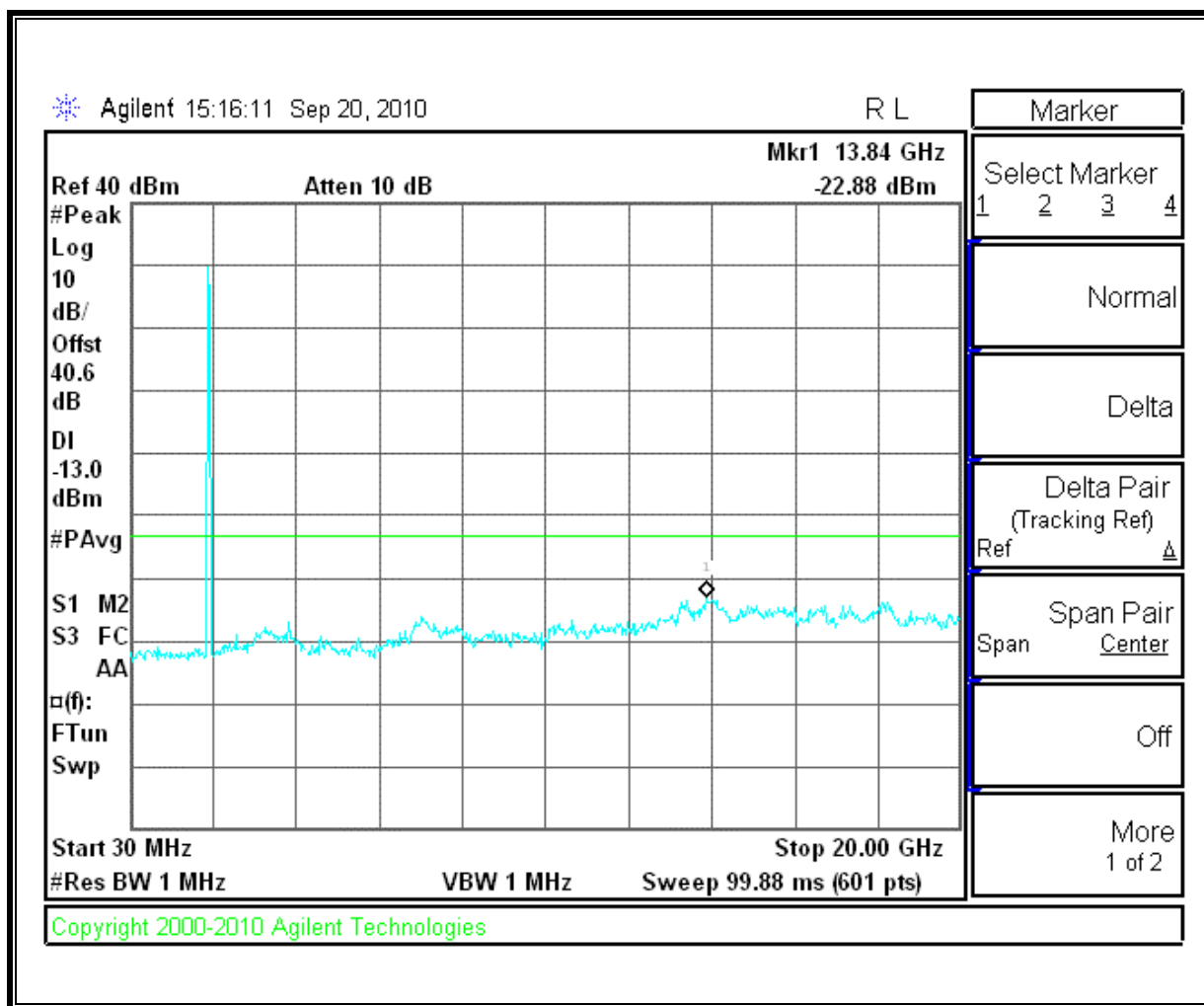
Low Channel, Out-Of-Band Emissions



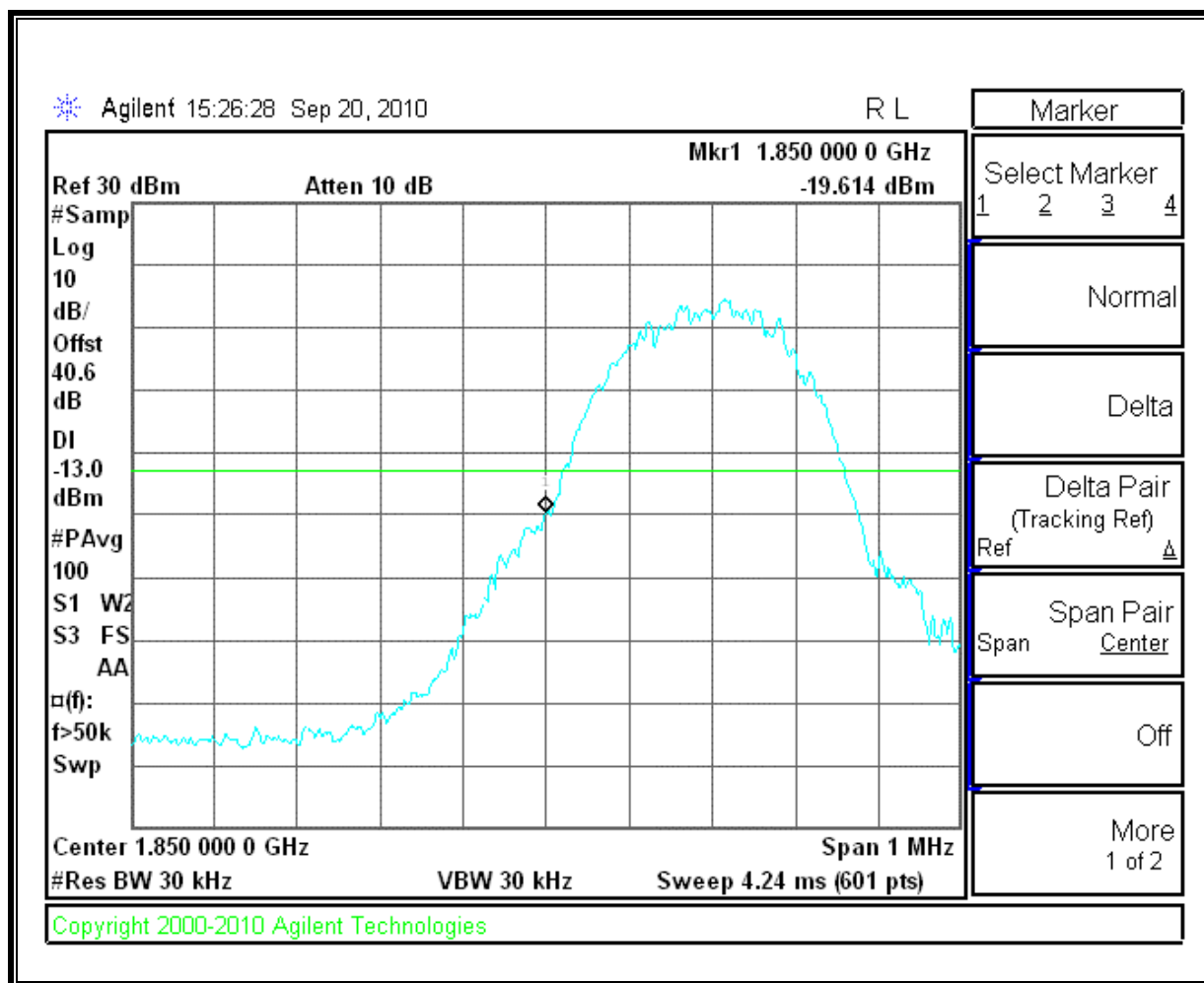
Mid Channel, Out-Of-Band Emissions



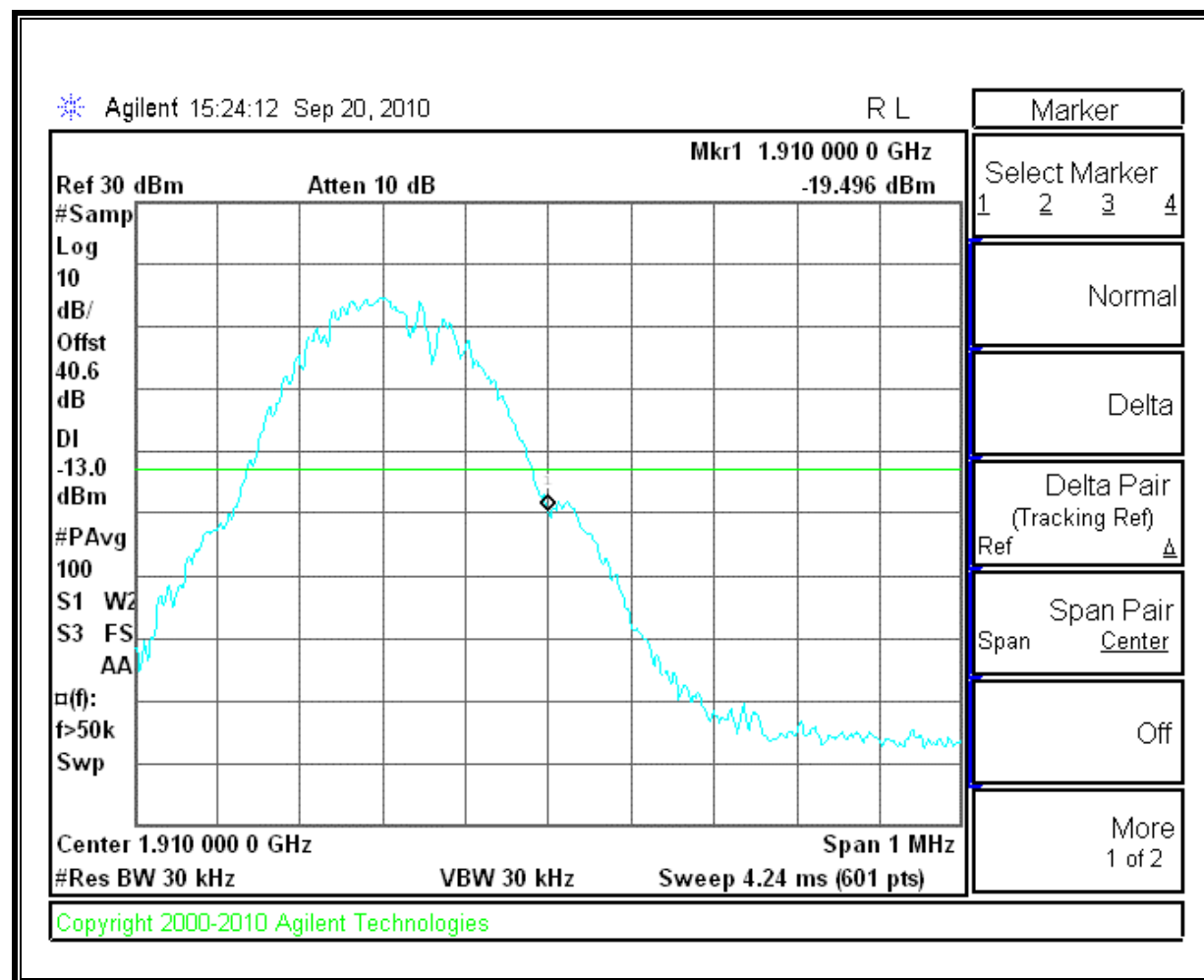
High Channel, Out-Of-Band Emissions



Low Channel Band Edge

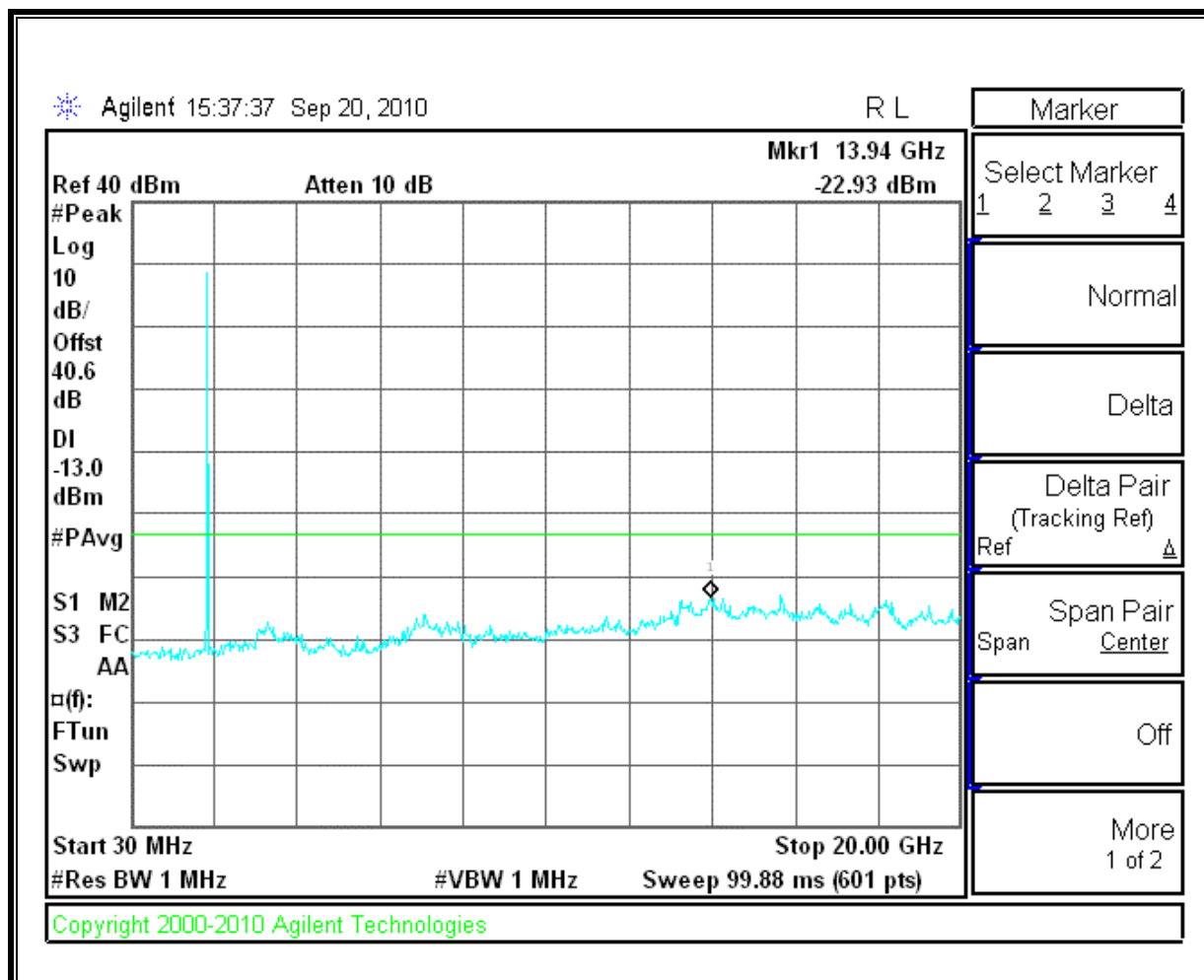


High Channel Band Edge

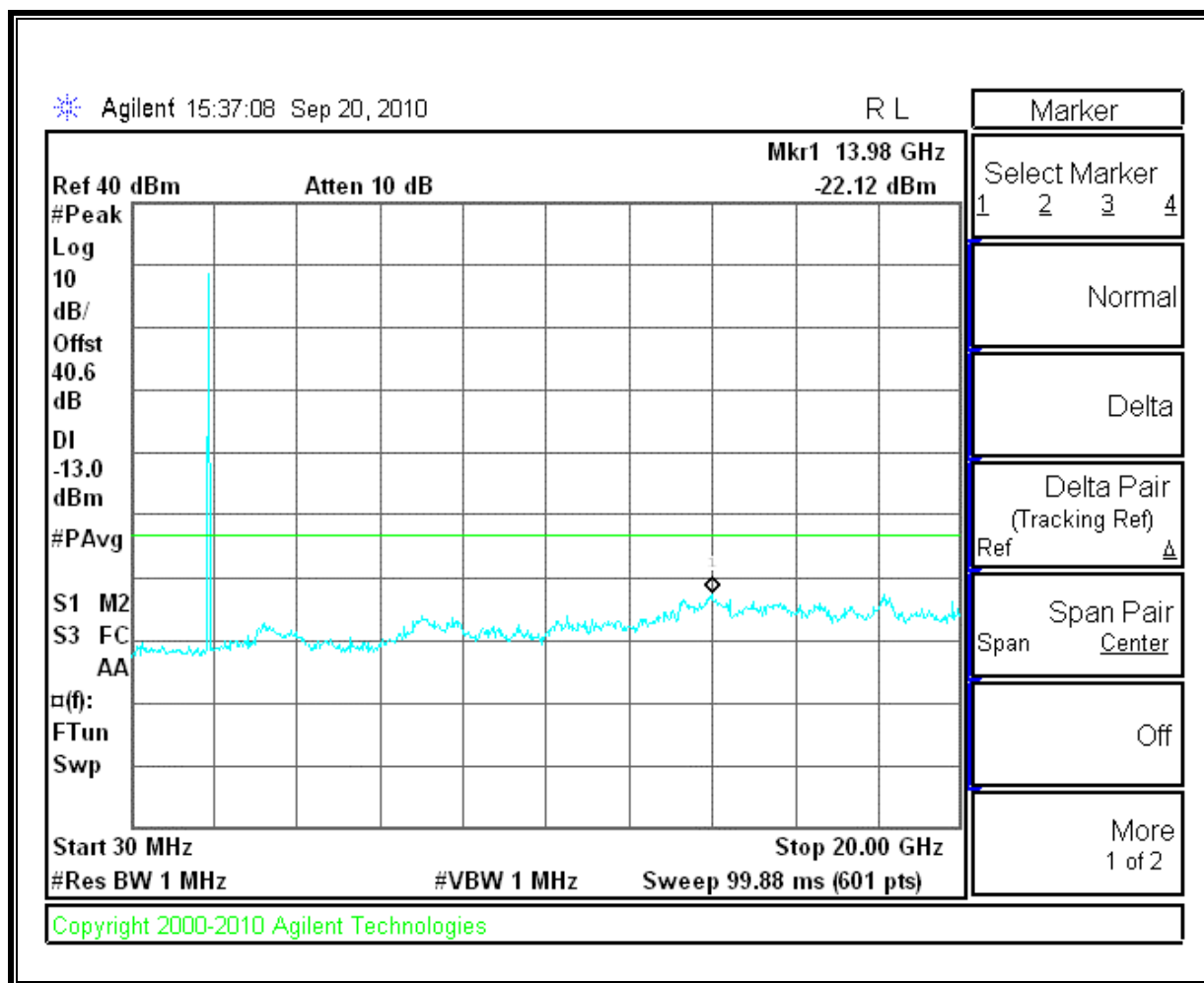


PCS EGPRS1900 MODULATION RESULTS

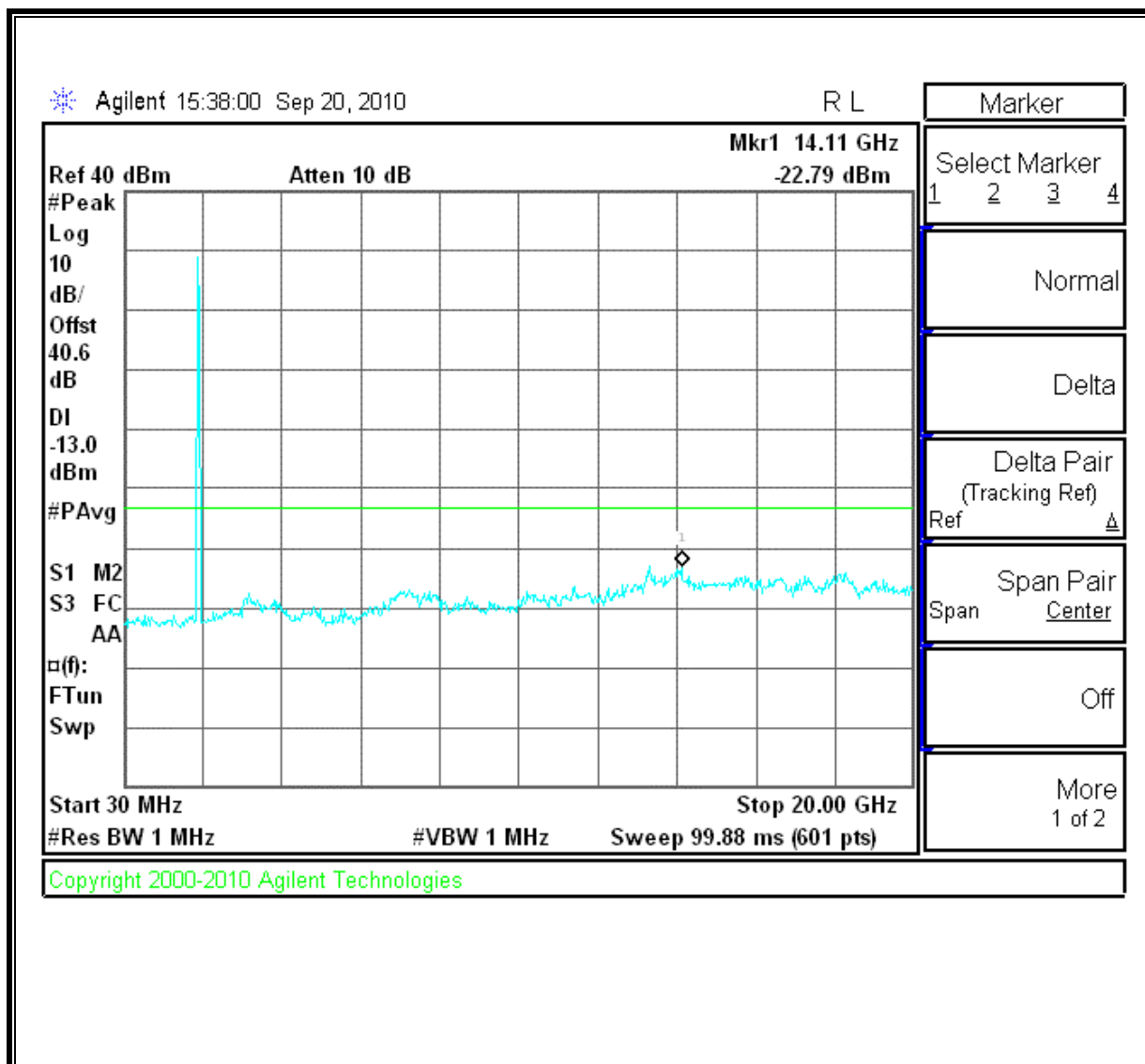
Low Channel, Out-Of-Band Emissions



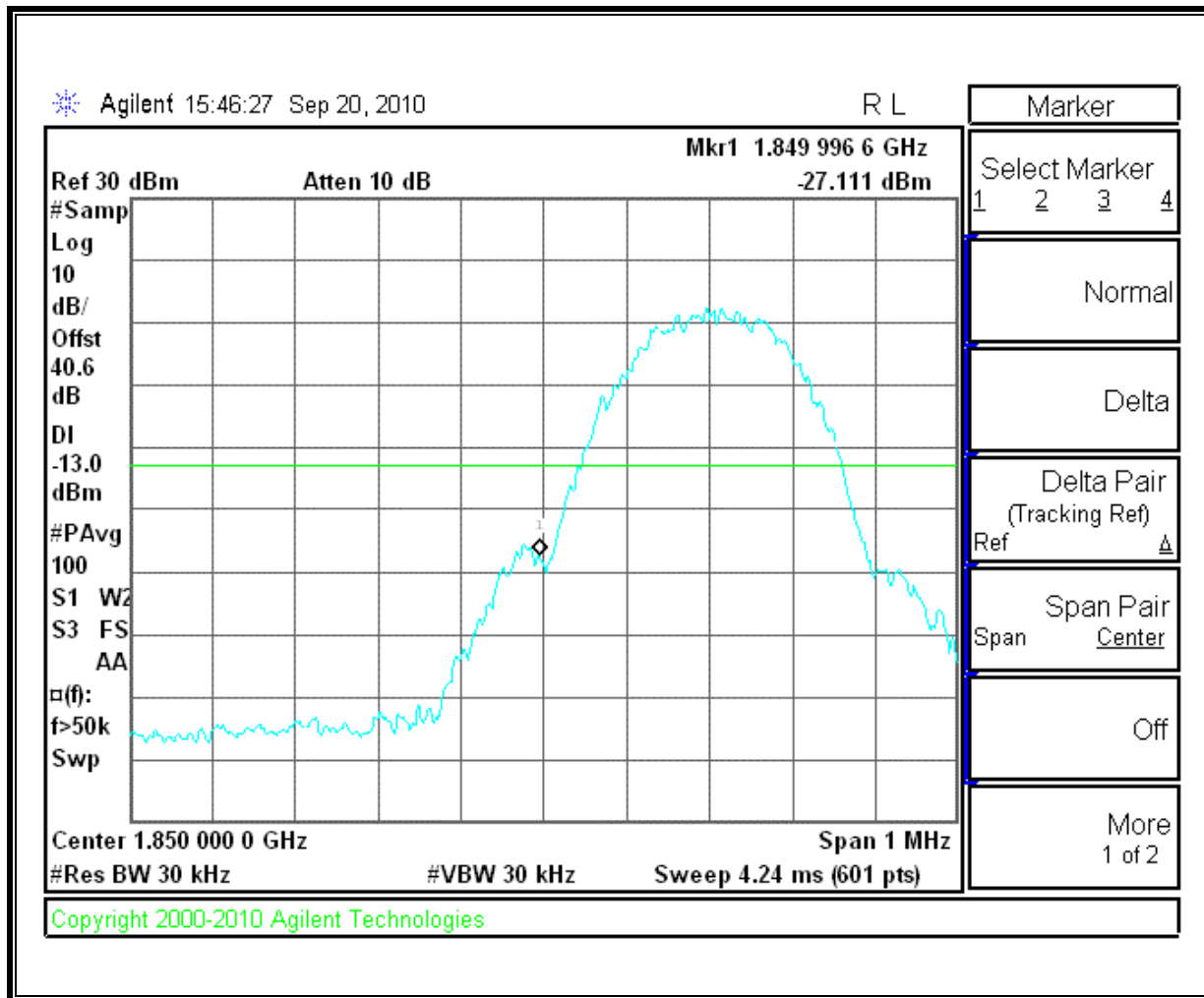
Mid Channel, Out-Of-Band Emissions



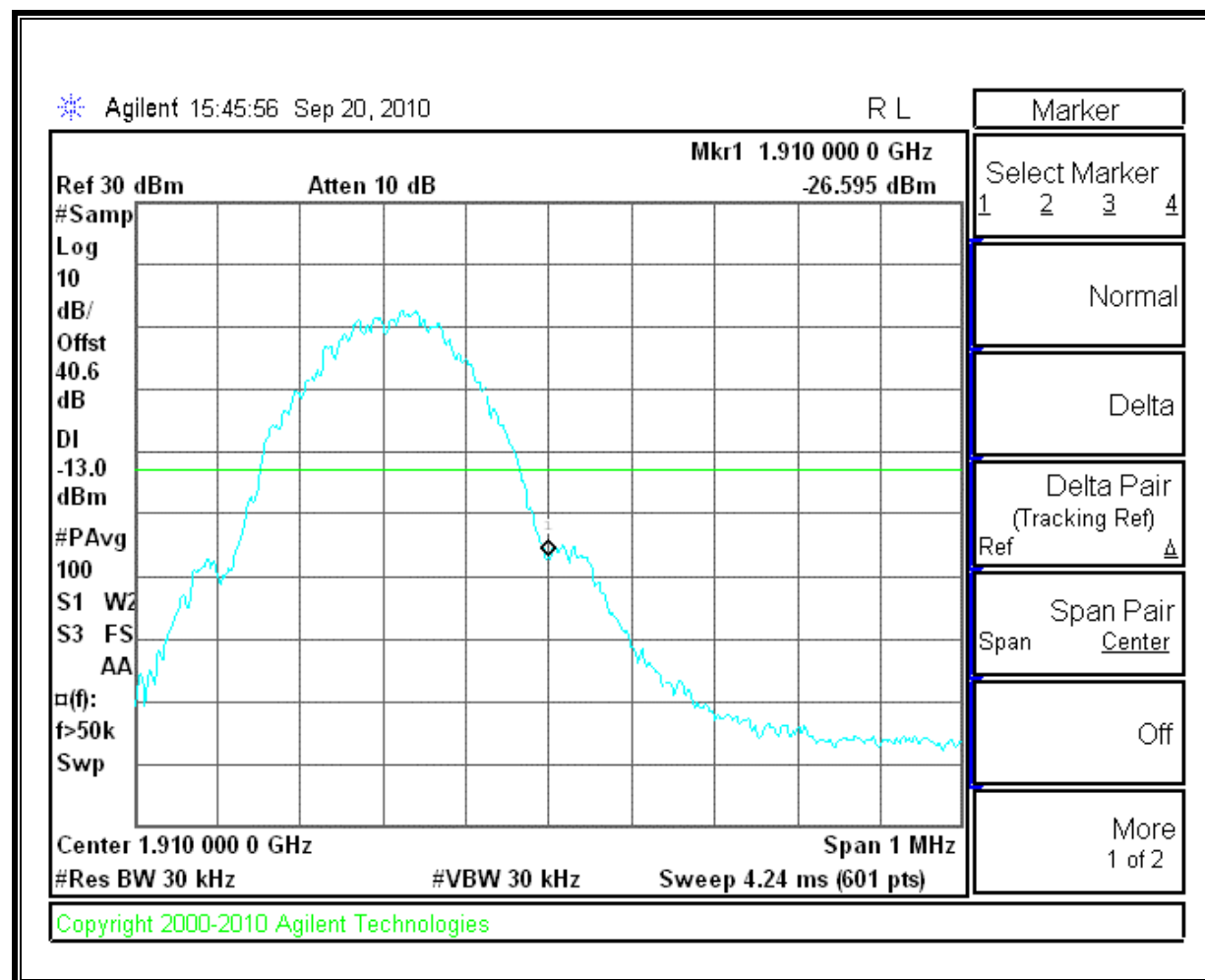
High Channel, Out-Of-Band Emissions



Low Channel Band Edge

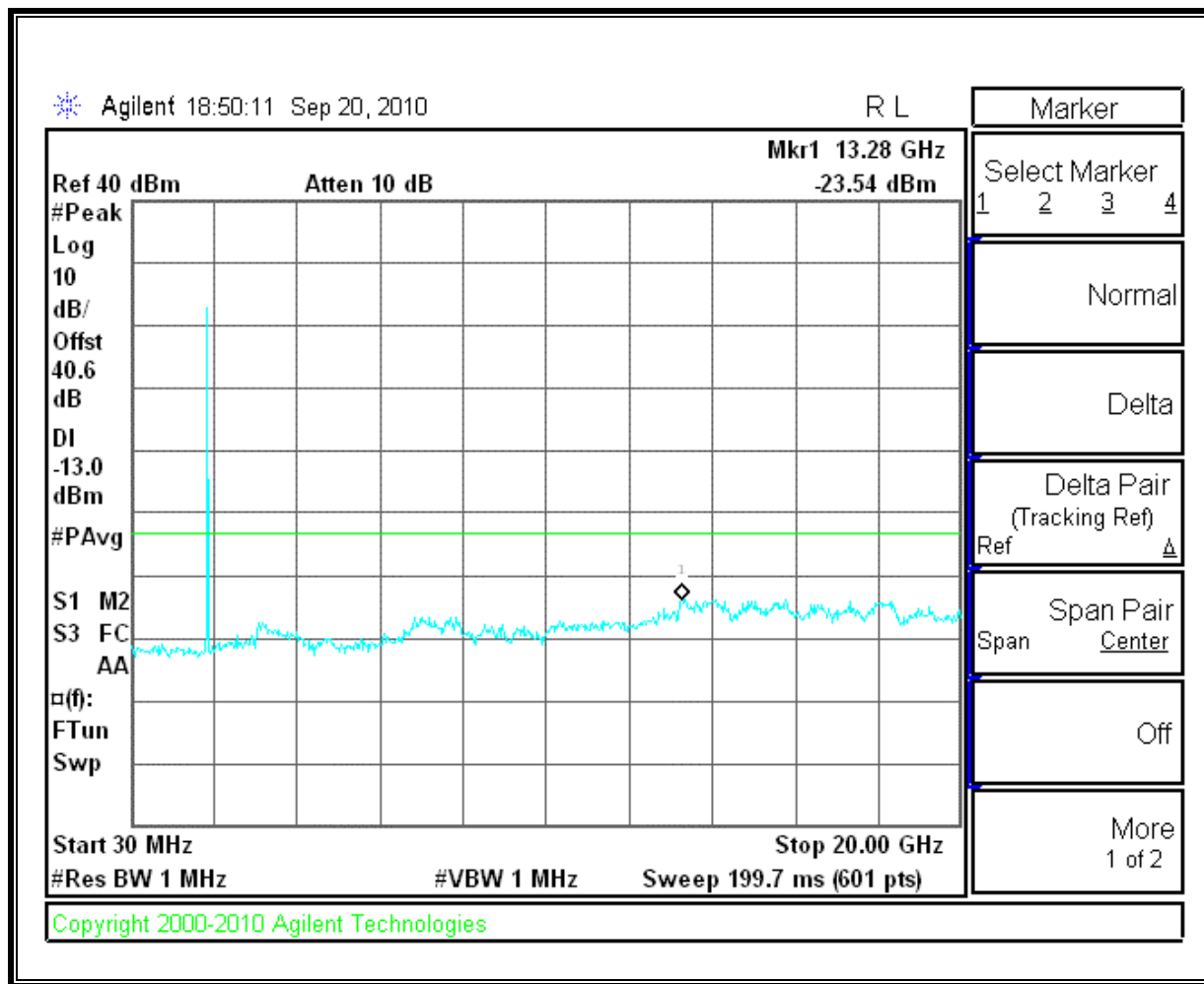


High Channel Band Edge

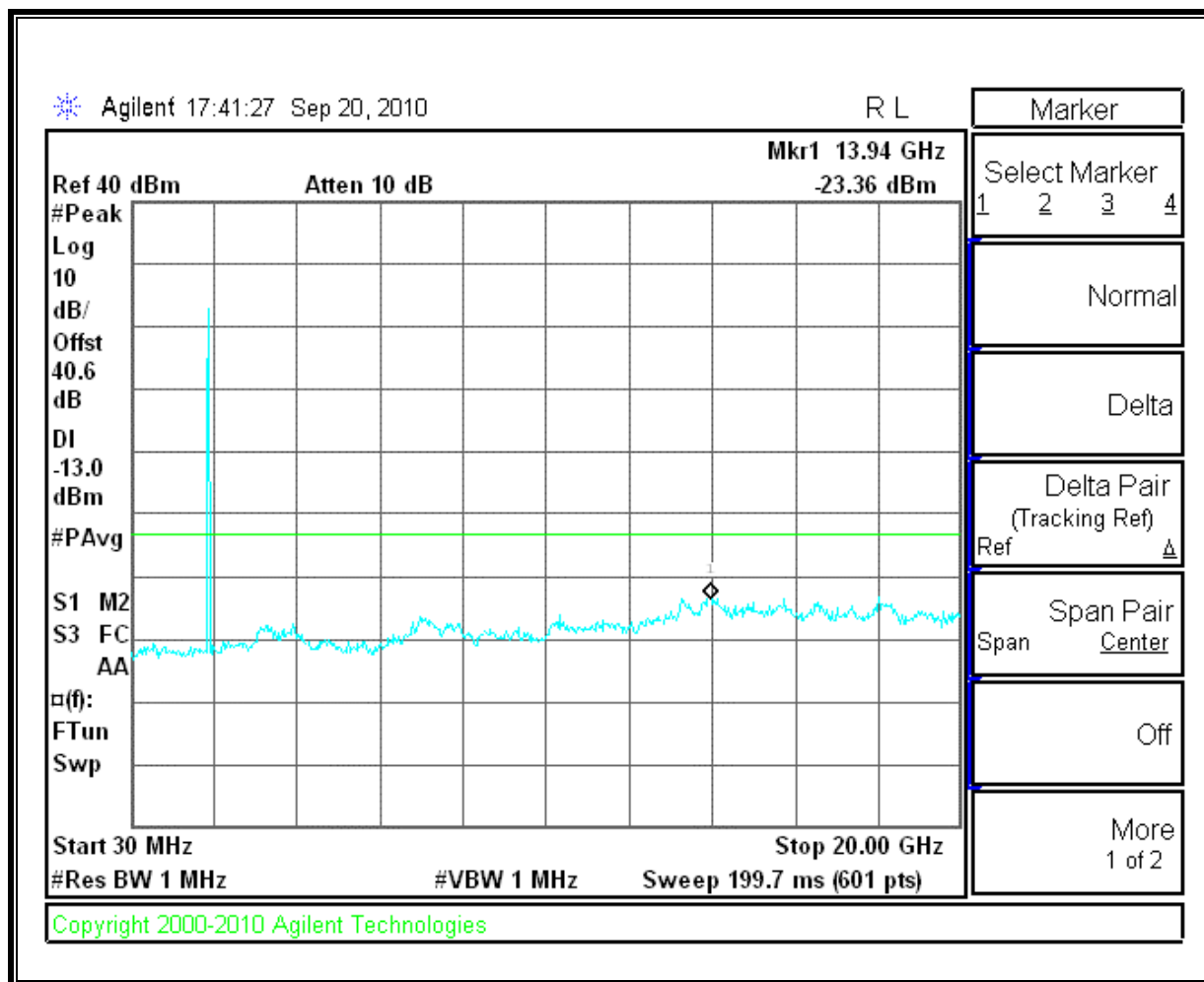


PCS, UMTS REL 99 MODULATION:

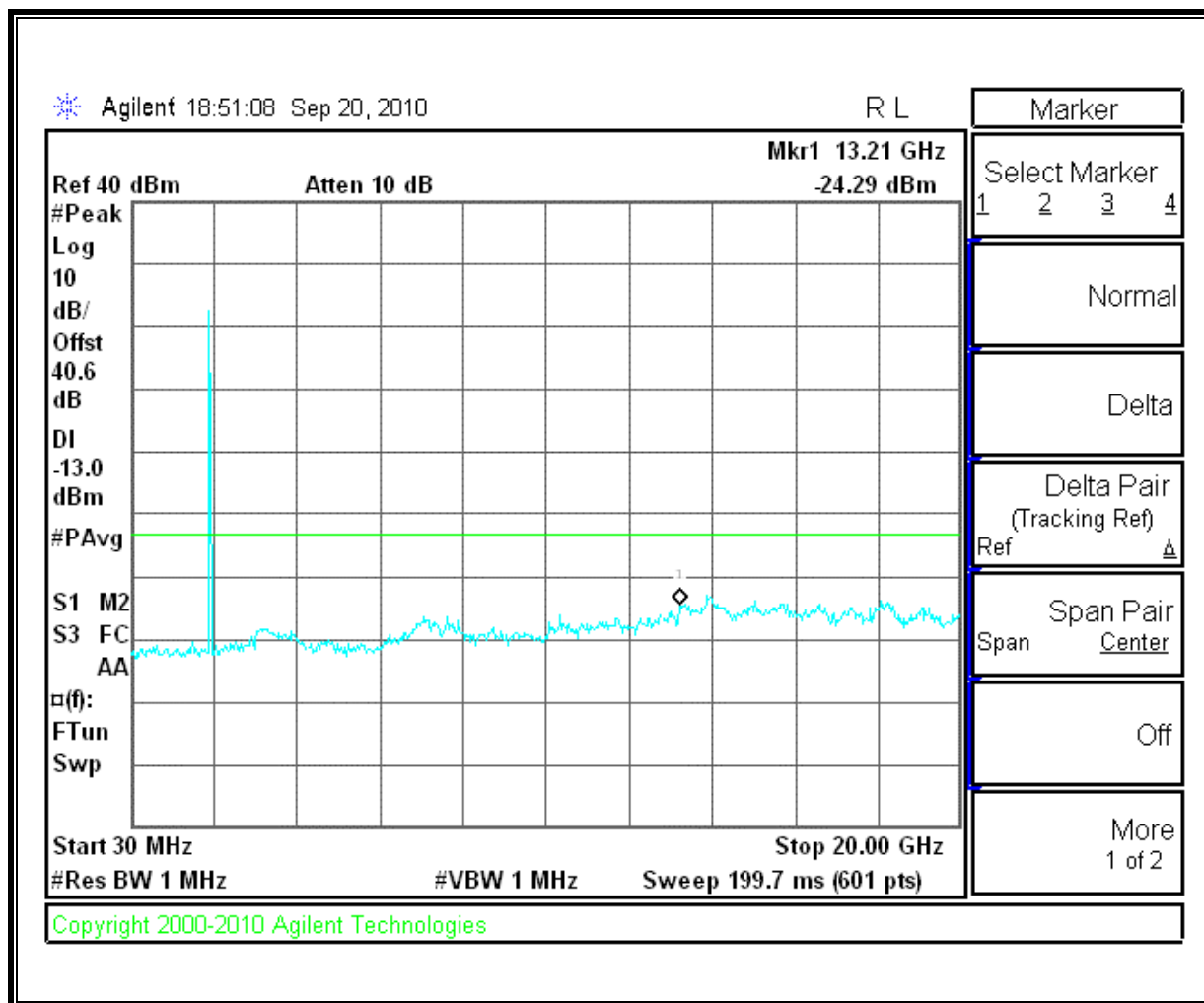
Low Channel, Out-Of-Band Emissions



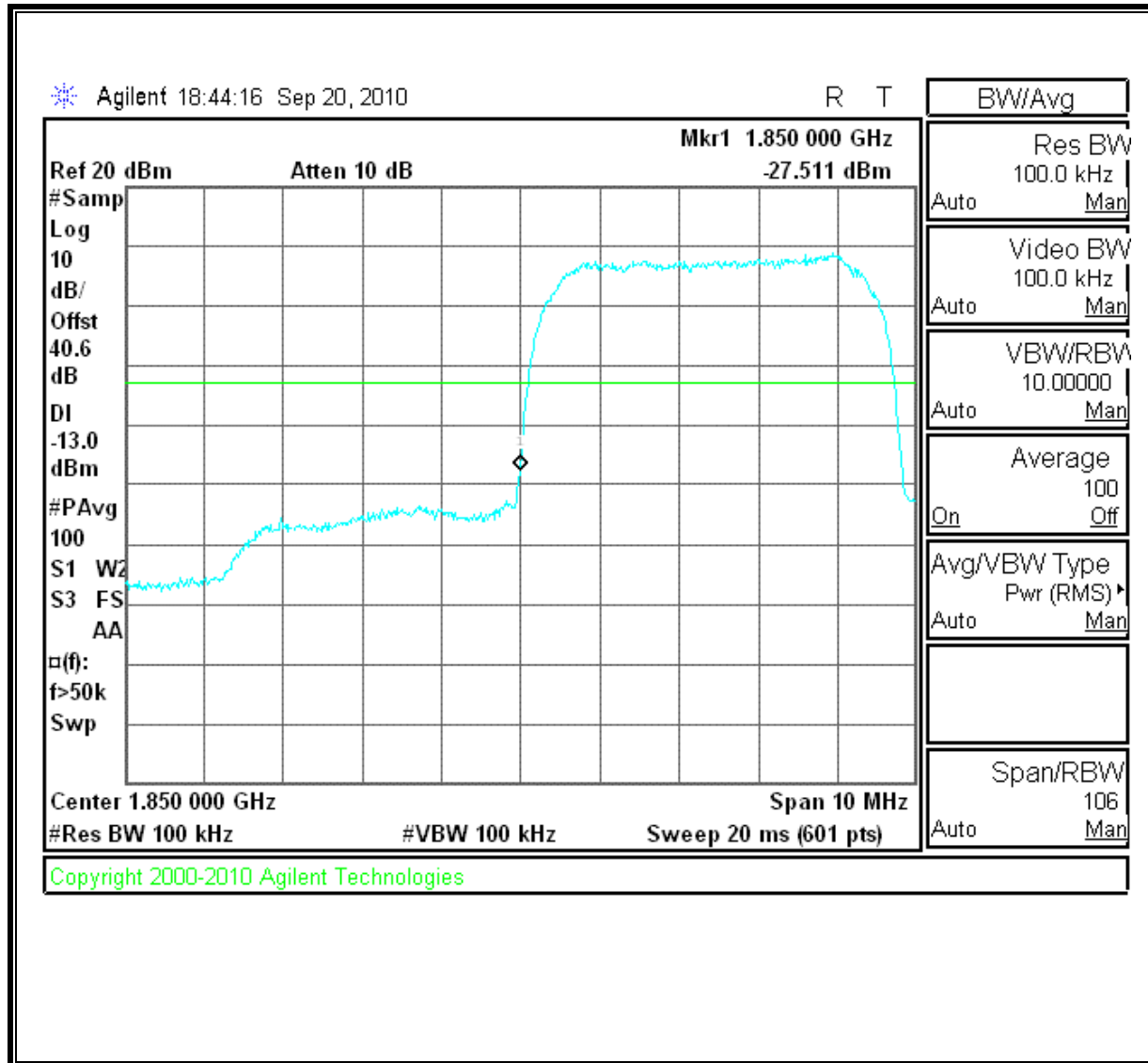
Mid Channel, Out-Of-Band Emissions



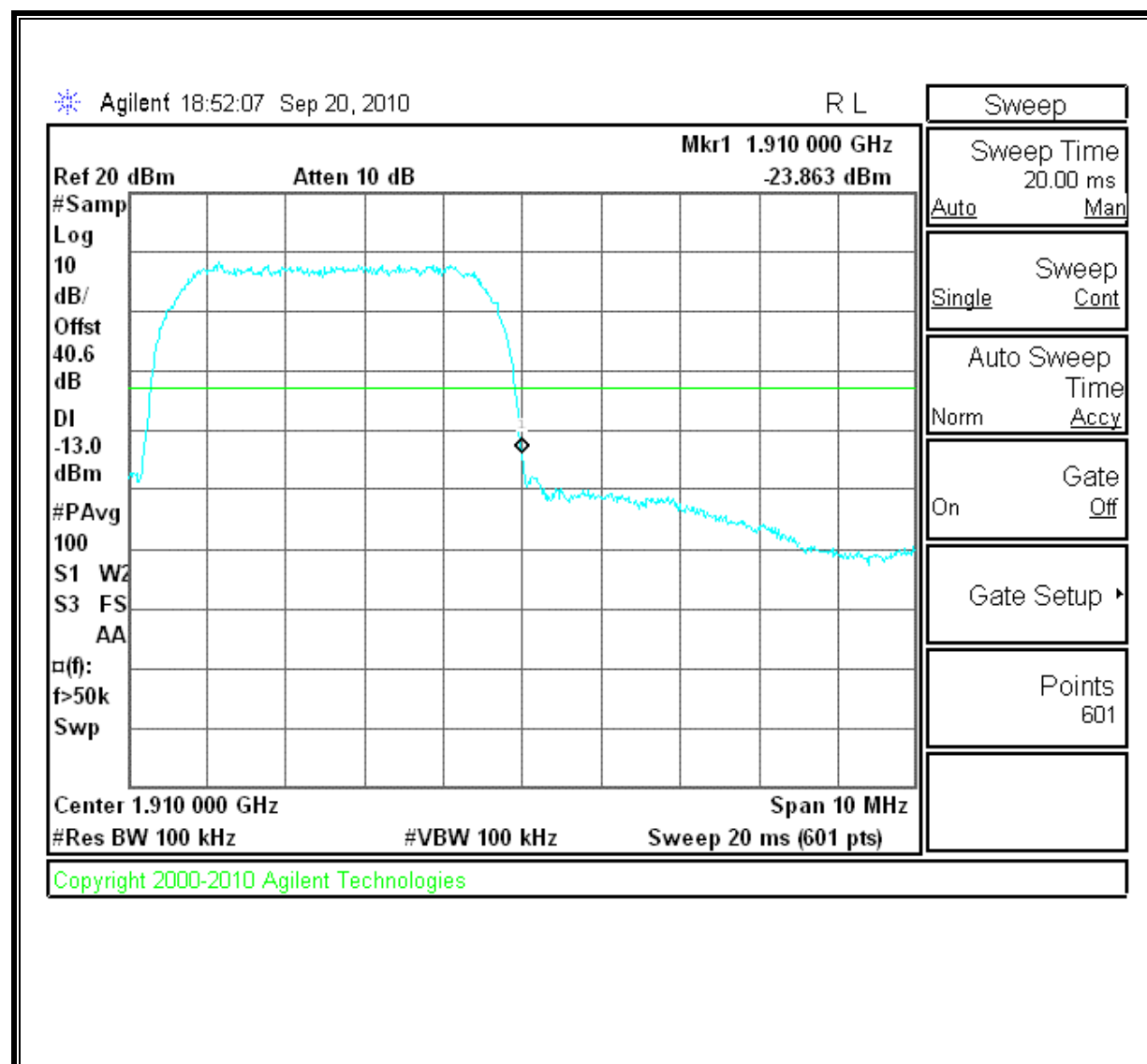
High Channel, Out-Of-Band Emissions



Low Channel Band Edge

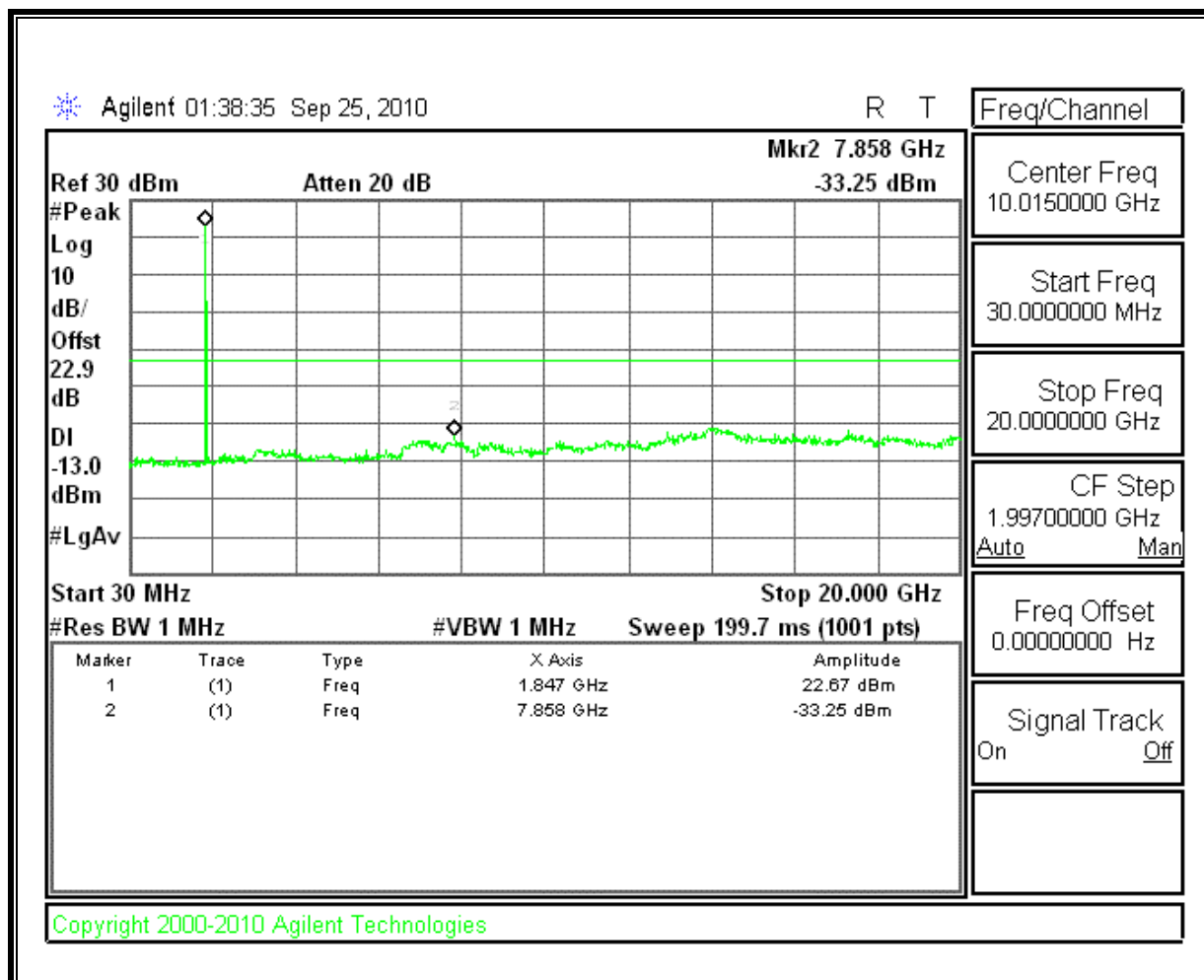


High Channel Band Edge

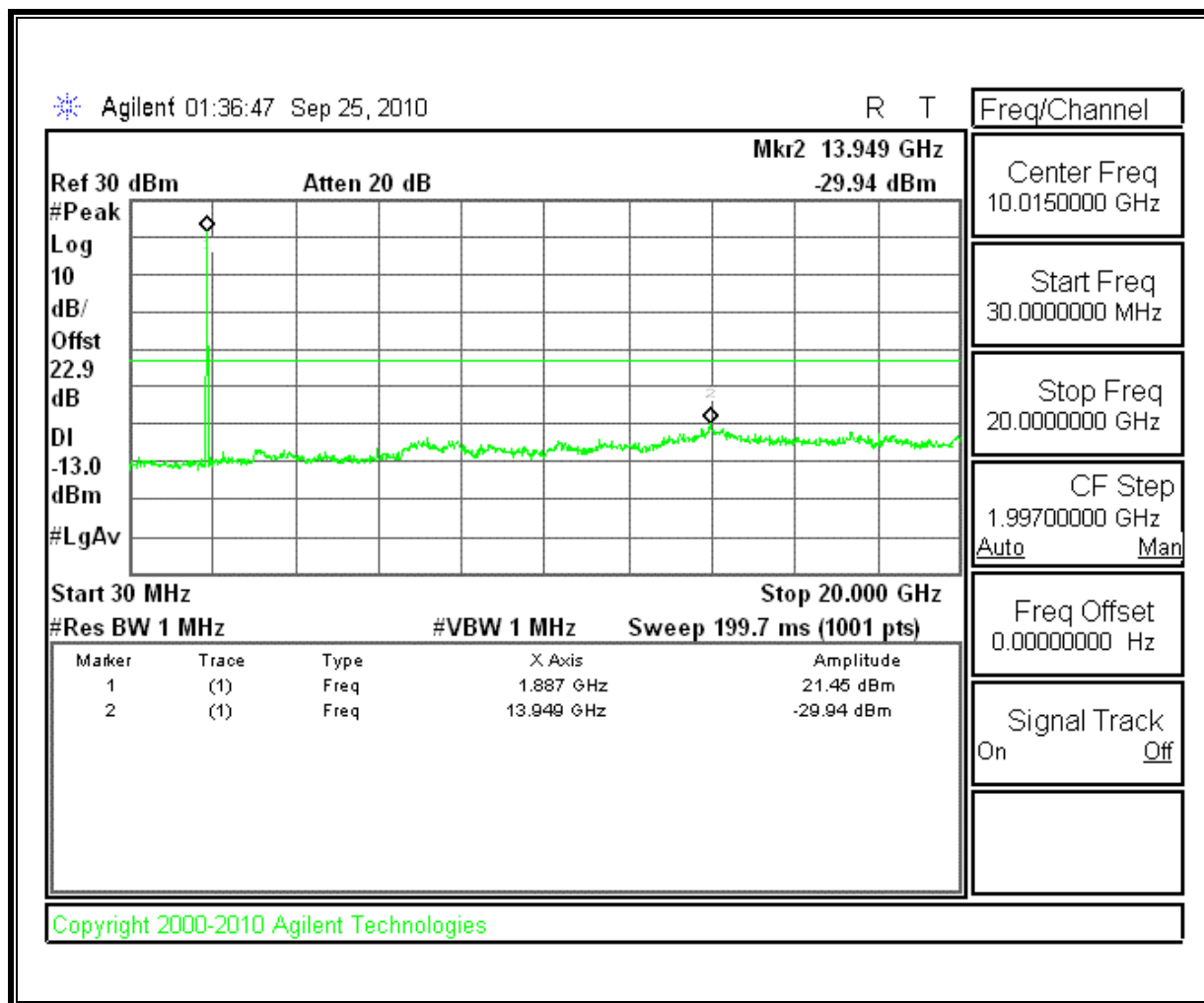


PCS, UMTS HSDPA MODULATION:

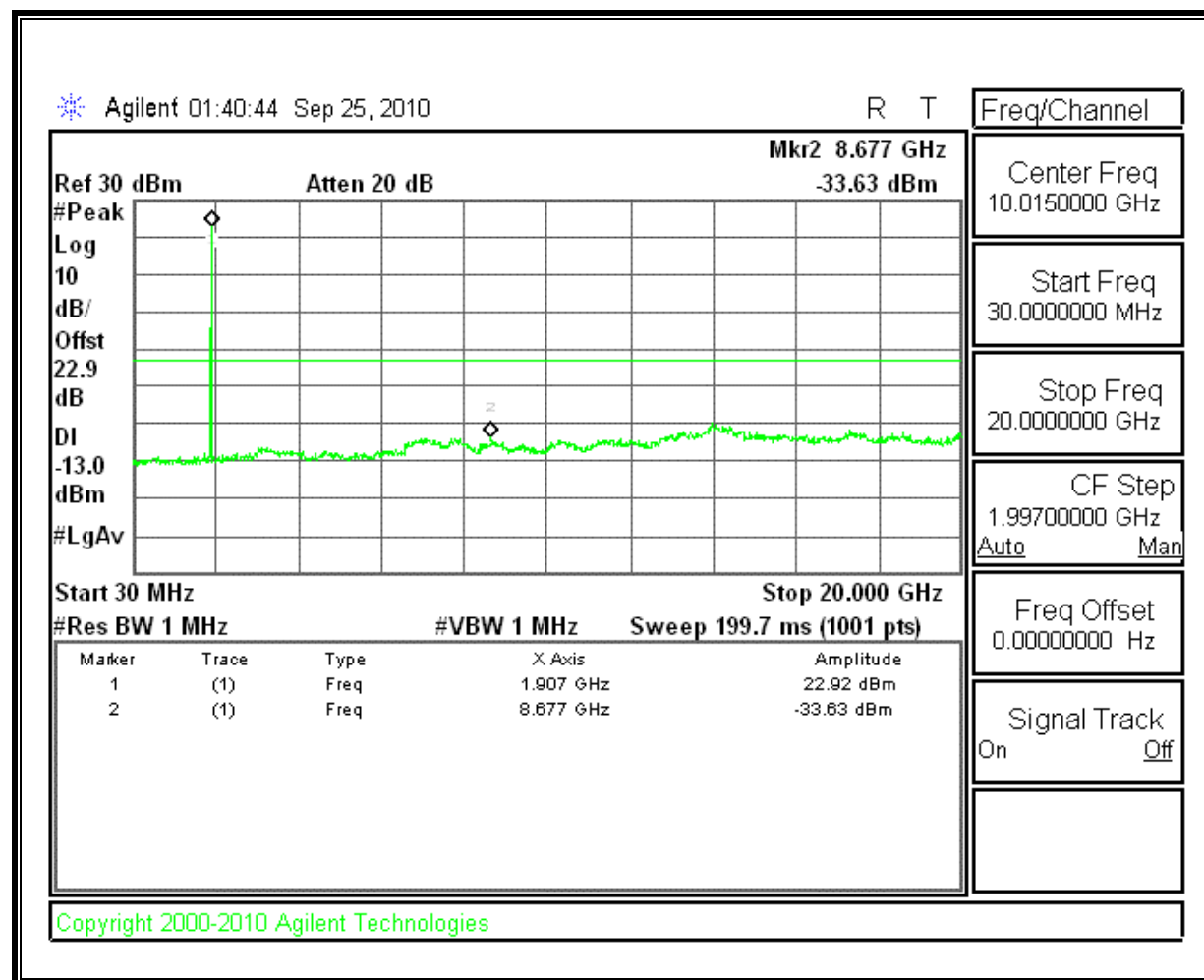
Low Channel, Out-Of-Band Emissions



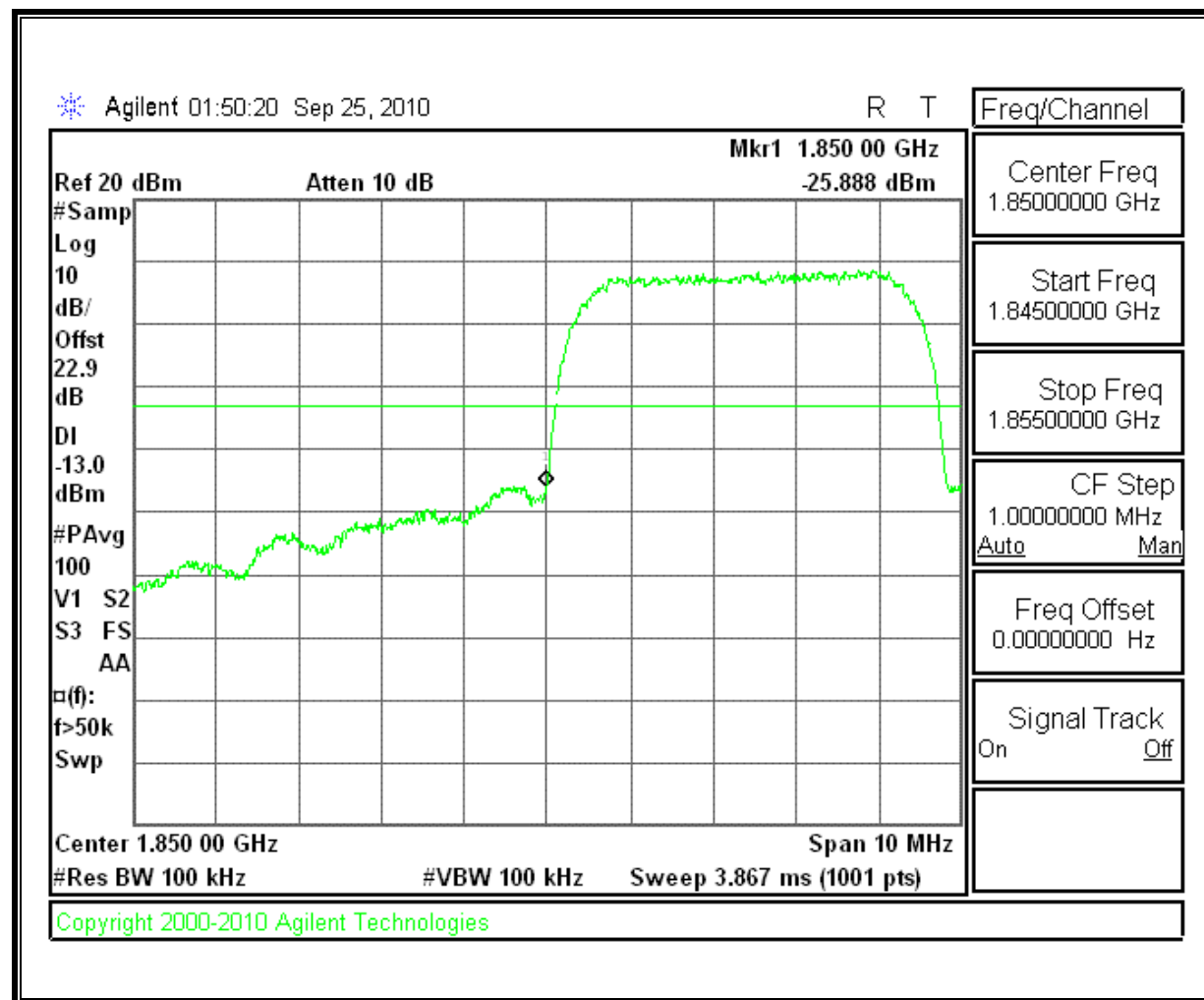
Mid Channel, Out-Of-Band Emissions



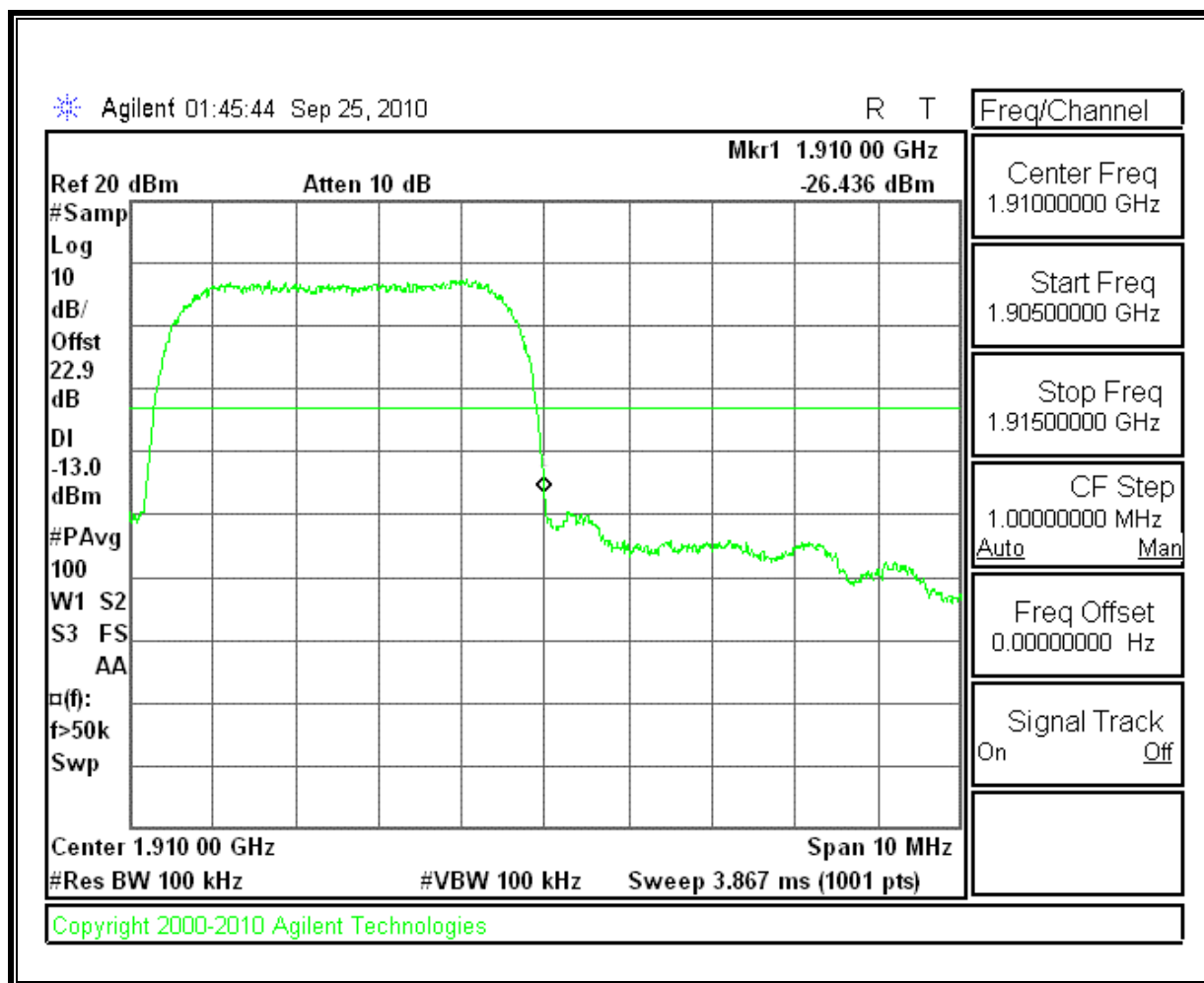
High Channel, Out-Of-Band Emissions



Low Channel Band Edge



High Channel Band Edge



7.4. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055, §22.355, §24.235

LIMITS

- §22.355 & RSS-132 4.3 - The carrier frequency shall not depart from the reference frequency in excess of ± 2.5 ppm for mobile stations.
- §24.235 - The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

TEST PROCEDURE

Use CMU200 with Frequency Error measurement capability.

- Temp. = -20° to $+50^{\circ}\text{C}$
- Voltage = 115 Vdc (85% - 115%)

Frequency Stability vs Temperature:

The EUT is placed inside a temperature chamber. The temperature is set to 20°C and allowed to stabilize. After sufficient soak time, the transmitting frequency error is measured. The temperature is increased by 10 degrees, allowed to stabilize and soak, and then the measurement is repeated. This is repeated until $+50^{\circ}\text{C}$ is reached.

Frequency Stability vs Voltage:

The peak frequency error is recorded (worst-case).

RESULTS

See the following pages.

CELL BAND – MID CHANNEL

Reference Frequency: Cellular Mid Channel 836.592746MHz @ 20°C Limit: to stay +/- 2.5 ppm = 2091.482 Hz				
DC Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
4.20	50	836.592765	-0.023	2.5
4.20	40	836.592761	-0.018	2.5
4.20	30	836.592757	-0.013	2.5
4.20	20	836.592746	0	2.5
4.20	10	836.592737	0.011	2.5
4.20	0	836.592729	0.020	2.5
4.20	-10	836.592724	0.026	2.5
4.20	-20	836.592714	0.038	2.5
4.83	20	836.592744	0.002	2.5
3.57	20	836.592748	-0.002	2.5
3.4 (end point voltage)	20	836.592744	0.002	2.5

PCS BAND- MID CHANNEL

Reference Frequency: PCS Mid Channel 1879.987788000MHz @ 20°C				
Limit: within the authorized block or +/- 2.5 ppm = 4699.969 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
4.20	50	1879.987741	0.025	2.5
4.20	40	1879.987753	0.019	2.5
4.20	30	1879.987764	0.013	2.5
4.20	20	1879.987788	0	2.5
4.20	10	1879.987803	-0.008	2.5
4.20	0	1879.987814	-0.014	2.5
4.20	-10	1879.987827	-0.021	2.5
4.20	-20	1879.987841	-0.028	2.5
4.83	20	1879.987792	0.00	2.5
3.57	20	1879.987780	0.00	2.5
3.4 (end point voltage)	20	1879.987777	0.01	2.5

8. RADIATED TEST RESULTS

8.1. RADIATED POWER (ERP & EIRP)

LIMIT

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

24.232(b) & RSS133 § 6.4 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.

RSS-132 § 4.4 The maximum ERP shall be 6.3 Watts for mobile stations.

TEST PROCEDURE

RSS-132, RSS-133, & ANSI / TIA / EIA 603C Clause 2.2.17

MODES TESTED

- GSM - GSM (GSMK) & EGPRS (8PSK)
- UMTS – REL 99 & HSDPA

RESULTS for Cellular Band (ERP)

Mode	Channel	f (MHz)	ERP (Inductive Cover)		ERP (Charging Dock)	
			dBm	mW	dBm	mW
GPRS850	128	824.20	30.00	1000.00	30.20	1047.13
	190	836.60	30.60	1148.15	30.80	1202.26
	251	848.80	29.10	812.83	29.50	891.25
EGPRS850	128	824.20	27.80	602.56	27.40	549.54
	190	836.60	28.20	660.69	27.90	616.60
	251	848.80	27.70	588.84	27.20	524.81
REL 99	128	826.40	23.10	204.17	23.20	208.93
	4407	836.40	23.80	239.88	23.20	208.93
	251	846.60	24.10	257.04	24.00	251.19
HSDPA	128	826.40	25.60	363.08	25.90	389.05
	4407	836.40	26.10	407.38	26.40	436.52
	251	846.60	26.50	446.68	26.70	467.74

Mode	Channel	f (MHz)	EIRP (Inductive Cover)		EIRP (Charging Dock)	
			dBm	mW	dBm	mW
GPRS1900	512	1850.20	29.20	831.76	27.50	562.34
	661	1880.00	29.90	977.24	28.90	776.25
	810	1909.80	29.70	933.25	29.10	812.83
EGPRS1900	512	1850.20	27.90	616.60	27.70	588.84
	661	1880.00	27.80	602.56	28.00	630.96
	810	1909.80	28.40	691.83	27.80	602.56
REL 99	512	1852.20	27.60	575.44	25.90	389.05
	9800	1880.00	25.90	389.05	25.10	323.59
	810	1908.40	24.80	302.00	24.90	309.03
HSDPA	512	1852.20	27.70	588.84	26.50	446.68
	9800	1880.00	25.10	323.59	25.60	363.08
	810	1908.40	25.30	338.84	25.00	316.23

RESULTS for PCS Band (EIRP)

EUT WITH INDUCTIVE COVER

ERP FOR GSM 850 MODE (CELLULAR BAND)

High Frequency Substitution Measurement Compliance Certification Services Chamber B							
Company: Palm							
Project #: 10U13380							
Date: 9/07/2010							
Test Engineer: Chin Pang							
Configuration: EUT (Inductive Cover) with AC Adapter and earphone							
Mode: TX, GSM850, GPRS							
Worst Position: Z Position, phone close							
<u>Test Equipment:</u>							
Receiving: Sunol T130, and 3m Chamber N-type Cable (Setup this one for testing EUT)							
Substitution: Dipole S/N: 00022117, 6ft SMA Cable (SN # 208947003) Warehouse.							
f MHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch							
824.20	-8.1	V	32.6	24.5	38.5	-14.0	
824.20	-0.3	H	30.4	30.0	38.5	-8.4	
Mid Ch							
836.60	-6.2	V	32.7	26.5	38.5	-12.0	
836.60	-0.2	H	30.7	30.6	38.5	-7.9	
High Ch							
848.80	-7.0	V	32.0	25.0	38.5	-13.5	
848.80	-1.7	H	30.8	29.1	38.5	-9.4	
Rev. 1.24.7							

ERP FOR EGPRS 850 MODE (CELL BAND)

High Frequency Substitution Measurement Compliance Certification Services Chamber B							
Company: Palm							
Project #: 10U13380							
Date: 9/07/2010							
Test Engineer: Chin Pang							
Configuration: EUT (Inductive Cover) with AC Adapter and earphone							
Mode: TX, GSM850, EGPRS							
Worst Position: Z Position, phone close							
Test Equipment:							
Receiving: Sunol T130, and 3m Chamber N-type Cable (Setup this one for testing EUT)							
Substitution: Dipole S/N: 00022117, 6ft SMA Cable (SN # 208947003) Warehouse.							
f MHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch							
824.20	-8.1	V	32.6	24.5	38.5	-14.0	
824.20	-2.6	H	30.4	27.8	38.5	-10.7	
Z							
836.60	-6.2	V	32.7	26.5	38.5	-12.0	
836.60	-2.5	H	30.7	28.2	38.5	-10.2	
High Ch							
848.80	-9.7	V	32.0	22.3	38.5	-16.1	
848.80	-3.1	H	30.8	27.7	38.5	-10.8	
Rev. 1.24.7							

ERP FOR UMTS REL 99 MODE (CELLULAR BAND)

**High Frequency Substitution Measurement
Compliance Certification Services Chamber A**

Company: Palm
Project #: 10U13380
Date: 9/8/10
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with AC Adapter
Mode: UMTS850, REL 99
Worst Position: Z

Test Equipment:

Receiving: Sunol T122, and 3m Chamber N-type Cable (Setup this one for testing EUT)
Substitution: Dipole S/N: 00022117, 6ft SMA Cable (SN # 208947003) Warehouse.

f MHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch							
826.40	-14.3	V	34.8	20.5	38.5	-18.0	
826.40	-7.4	H	30.5	23.1	38.5	-15.3	
Mid Ch							
836.40	-13.9	V	33.1	19.2	38.5	-19.2	
836.40	-7.4	H	31.2	23.8	38.5	-14.7	
High Ch							
846.60	-13.2	V	32.1	18.9	38.5	-19.5	
846.60	-7.1	H	31.2	24.1	38.5	-14.3	

Rev. 1.24.7

ERP FOR UMTS HSDPA MODE (CELLULAR BAND)

**High Frequency Substitution Measurement
Compliance Certification Services Chamber A**

Company: Palm
Project #: 10U13380
Date: 9/8/10
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with AC Adapter
Mode: UMTS850, HSDPA
Worst Position: Z

Test Equipment:

Receiving: Sunol T122, and 3m Chamber N-type Cable (Setup this one for testing EUT)
Substitution: Dipole S/N: 00022117, 6ft SMA Cable (SN # 208947003) Warehouse.

f MHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch							
826.40	-14.5	V	34.8	20.3	38.5	-18.2	
826.40	-4.9	H	30.5	25.6	38.5	-12.8	
Mid Ch							
836.40	-12.7	V	33.1	20.4	38.5	-18.0	
836.40	-5.1	H	31.2	26.1	38.5	-12.4	
High Ch							
846.60	-11.9	V	32.1	20.3	38.5	-18.2	
846.60	-4.7	H	31.2	26.5	38.5	-11.9	

Rev. 1.24.7

EIRP FOR GSM1900 MODE (PCS BAND)

**High Frequency Fundamental Measurement
Compliance Certification Services Chamber B**

Company: Palm
Project #: 10U13390
Date: 9/07/2010
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with earphone
Mode: TX, GSM1900, GPRS

Test Equipment:

Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T72 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch							
1.850	-11.0	V	40.2	29.2	33.0	-3.8	
1.850	-11.9	H	39.5	27.6	33.0	-5.4	
Mid Ch							
1.880	-10.4	V	40.3	29.9	33.0	-3.2	
1.880	-13.2	H	40.1	26.9	33.0	-6.1	
High Ch							
1.910	-10.5	V	40.2	29.7	33.0	-3.3	
1.910	-12.8	H	40.1	27.3	33.0	-5.7	

Rev. 1.24.7

EIRP FORE GPRS1900 MODE (PCS BAND)

**High Frequency Fundamental Measurement
Compliance Certification Services Chamber B**

Company: Palm
Project #: 10U13390
Date: 9/07/2010
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with AC Adapter and earphone
Mode: TX, GSM1900, EGPRS

Test Equipment:

Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T72 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch							
1.850	-12.3	V	40.2	27.9	33.0	-5.1	
1.850	-13.0	H	39.5	26.5	33.0	-6.5	
Mid Ch							
1.880	-12.5	V	40.3	27.8	33.0	-5.3	
1.880	-13.2	H	40.1	26.9	33.0	-6.1	
High Ch							
1.910	-11.8	V	40.2	28.4	33.0	-4.6	
1.910	-13.3	H	40.1	26.8	33.0	-6.2	

Rev. 1.24.7

EIRP FOR UMTS REL 99 MODE (PCS BAND)

**High Frequency Fundamental Measurement
Compliance Certification Services Chamber A**

Company: Palm
Project #: 10U13380
Date: 9/8/10
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with AC Adapter
Mode: UMTS1900, REL 99
Worst Position: X

Test Equipment:

Receiving: Horn T73, and Camber B SMA Cables
Substitution: Horn T72 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch							
1.852	-12.8	V	40.4	27.6	33.0	-5.4	
1.852	-15.3	H	39.7	24.4	33.0	-8.6	
Mid Ch							
1.880	-14.0	V	39.9	25.9	33.0	-7.1	
1.880	-16.8	H	40.1	23.3	33.0	-9.7	
High Ch							
1.908	-15.0	V	39.8	24.8	33.0	-8.2	
1.908	-17.2	H	40.2	23.0	33.0	-10.1	

Rev. 1.24.7

EIRP FOR UMTS HSDPA MODE (PCS BAND)

**High Frequency Fundamental Measurement
Compliance Certification Services Chamber A**

Company: Palm
Project #: 10U13380
Date: 9/8/10
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with AC Adapter
Mode: UMTS1900, HSDPA
Worst Position: X

Test Equipment:

Receiving: Horn T73, and Camber B SMA Cables
Substitution: Horn T72 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch							
1.852	-12.7	V	40.4	27.7	33.0	-5.3	
1.852	-15.1	H	39.7	24.6	33.0	-8.4	
Mid Ch							
1.880	-14.8	V	39.9	25.1	33.0	-7.9	
1.880	-18.7	H	40.1	21.4	33.0	-11.6	
High Ch							
1.908	-14.5	V	39.8	25.3	33.0	-7.7	
1.908	-16.5	H	40.2	23.7	33.0	-9.4	

Rev. 1.24.7

EUT WITH INDUCTIVE BACKCOVER AND CHARGING DOCK

ERP FOR GSM 850 MODE (CELLULAR BAND)

High Frequency Substitution Measurement Compliance Certification Services Chamber B							
Company: Palm Project #: 10U13380 Date: 9/07/2010 Test Engineer: Chin Pang Configuration: EUT (Inductive Cover) with Charging Dock Mode: TX, GPRS 850							
Test Equipment: Receiving: Sunol T130, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00022117, 6ft SMA Cable (SN # 208947003) Warehouse.							
f MHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch							
824.20	-4.5	V	32.6	28.1	38.5	-10.3	
824.20	-0.1	H	30.4	30.2	38.5	-8.2	
Mid Ch							
836.60	-5.1	V	32.7	27.6	38.5	-10.9	
836.60	0.0	H	30.7	30.8	38.5	-7.7	
High Ch							
848.80	-4.9	V	32.0	27.1	38.5	-11.4	
848.80	-1.3	H	30.8	29.5	38.5	-9.0	
Rev. 1.24.7							

ERP FOR EGPRS 850 MODE (CELL BAND)

**High Frequency Substitution Measurement
Compliance Certification Services Chamber B**

Company: Palm
Project #: 10U13380
Date: 9/07/2010
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with Charging Dock
Mode: TX, EGPRS 850

Test Equipment:

Receiving: Sunol T130, and 3m Chamber N-type Cable (Setup this one for testing EUT)
Substitution: Dipole S/N: 00022117, 6ft SMA Cable (SN # 208947003) Warehouse.

f MHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch							
824.20	-8.5	V	32.6	24.1	38.5	-14.4	
824.20	-3.0	H	30.4	27.4	38.5	-11.1	
Mid Ch							
836.60	-9.7	V	32.7	23.0	38.5	-15.5	
836.60	-2.8	H	30.7	27.9	38.5	-10.5	
High Ch							
848.80	-10.3	V	32.0	21.7	38.5	-16.8	
848.80	-3.6	H	30.8	27.2	38.5	-11.3	

Rev. 1.24.7

ERP FOR UMTS REL 99 MODE (CELLULAR BAND)

High Frequency Substitution Measurement Compliance Certification Services Chamber A							
Company: Palm Project #: 10U13380 Date: 9/8/10 Test Engineer: Chin Pang Configuration: EUT (Inductive Cover) with Charging Dock Mode: UMTS850, REL 99							
Test Equipment: Receiving: Sunol T122, and 3m Chamber N-type Cable (Setup this one for testing EUT) Substitution: Dipole S/N: 00022117, 6ft SMA Cable (SN # 208947003) Warehouse.							
f MHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch							
826.40	-11.6	V	34.8	23.2	38.5	-15.3	
826.40	-8.5	H	30.5	22.0	38.5	-16.4	
Mid Ch							
836.40	-12.5	V	33.1	20.6	38.5	-17.8	
836.40	-8.0	H	31.2	23.2	38.5	-15.3	
High Ch							
846.60	-12.2	V	32.1	19.9	38.5	-18.5	
846.60	-7.2	H	31.2	24.0	38.5	-14.4	
Rev. 1.24.7							

ERP FOR UMTS HSDPA MODE (CELLULAR BAND)

**High Frequency Substitution Measurement
Compliance Certification Services Chamber A**

Company: Palm
Project #: 10U13380
Date: 9/8/10
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with Charging Dock
Mode: UMTS850, HSDPA

Test Equipment:

Receiving: Sunol T122, and 3m Chamber N-type Cable (Setup this one for testing EUT)
Substitution: Dipole S/N: 00022117, 6ft SMA Cable (SN # 208947003) Warehouse.

f MHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch							
826.40	-11.0	V	34.8	23.8	38.5	-14.7	
826.40	-4.6	H	30.5	25.9	38.5	-12.5	
Mid Ch							
836.40	-12.6	V	33.1	20.5	38.5	-17.9	
836.40	-4.8	H	31.2	26.4	38.5	-12.1	
High Ch							
846.60	-12.5	V	32.1	19.6	38.5	-18.8	
846.60	-4.5	H	31.2	26.7	38.5	-11.7	

Rev. 1.24.7

EIRP FOR GSM1900 MODE (PCS BAND)

**High Frequency Fundamental Measurement
Compliance Certification Services Chamber B**

Company: Palm
Project #: 10U13390
Date: 9/07/2010
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with Charging Dock
Mode: TX, GPRS1900, PCS band

Test Equipment:

Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T72 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch							
1.850	-16.3	V	40.2	23.9	33.0	-9.1	
1.850	-12.0	H	39.5	27.5	33.0	-5.5	
Mid Ch							
1.880	-16.7	V	40.3	23.6	33.0	-9.5	
1.880	-11.2	H	40.1	28.9	33.0	-4.1	
High Ch							
1.910	-13.9	V	40.2	26.3	33.0	-6.7	
1.910	-11.0	H	40.1	29.1	33.0	-3.9	

Rev. 1.24.7

EIRP FORE GPRS1900 MODE (PCS BAND)

**High Frequency Fundamental Measurement
Compliance Certification Services Chamber B**

Company: Palm
Project #: 10U13390
Date: 9/07/2010
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with Charging Dock
Mode: TX, GSM1900, EGPRS

Test Equipment:

Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T72 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch							
1.850	-12.6	V	40.2	27.6	33.0	-5.4	
1.850	-11.8	H	39.5	27.7	33.0	-5.3	
Mid Ch							
1.880	-12.5	V	40.3	27.8	33.0	-5.3	
1.880	-12.1	H	40.1	28.0	33.0	-5.0	
High Ch							
1.910	-14.2	V	40.2	26.0	33.0	-7.0	
1.910	-12.3	H	40.1	27.8	33.0	-5.2	

Rev. 1.24.7

EIRP FOR UMTS REL 99 MODE (PCS BAND)

**High Frequency Fundamental Measurement
Compliance Certification Services Chamber A**

Company: Palm
Project #: 10U13380
Date: 9/8/10
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with Charging Dock
Mode: UMTS1900, REL 99

Test Equipment:

Receiving: Horn T73, and Camber B SMA Cables
Substitution: Horn T72 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch							
1.852	-19.8	V	40.4	20.6	33.0	-12.4	
1.852	-13.8	H	39.7	25.9	33.0	-7.1	
Mid Ch							
1.880	-19.5	V	39.9	20.4	33.0	-12.6	
1.880	-15.0	H	40.1	25.1	33.0	-7.9	
High Ch							
1.908	-20.0	V	39.8	19.8	33.0	-13.2	
1.908	-15.3	H	40.2	24.9	33.0	-8.2	

Rev. 1.24.7

EIRP FOR UMTS HSDPA MODE (PCS BAND)

**High Frequency Fundamental Measurement
Compliance Certification Services Chamber A**

Company: Palm
Project #: 10U13380
Date: 9/8/10
Test Engineer: Chin Pang
Configuration: EUT (Inductive Cover) with Charging Dock
Mode: UMTS1900, HSDPA

Test Equipment:

Receiving: Horn T73, and Camber B SMA Cables
Substitution: Horn T72 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Path Loss (dBm)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch							
1.852	-18.2	V	40.4	22.2	33.0	-10.8	
1.852	-13.2	H	39.7	26.5	33.0	-6.5	
Mid Ch							
1.880	-17.8	V	39.9	22.1	33.0	-10.9	
1.880	-14.6	H	40.1	25.6	33.0	-7.4	
High Ch							
1.908	-20.2	V	39.8	19.6	33.0	-13.4	
1.908	-15.2	H	40.2	25.0	33.0	-8.1	

Rev. 1.24.7

8.2. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

FCC: §2.1053, §22.917, §24.238
IC: RSS-132, 4.5; RSS-233, 6.5

LIMIT

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

For Cellular equipment - Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

For PCS equipment - Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

MODES TESTED

- GSM - GSM (GSMK) & EGPRS (8PSK)
- UMTS – REL 99 & HSDPA

RESULTS

EUT WITH INDUCTIVE COVER

ERP FOR GSM 850 MODE (CELLULAR BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:		PALM								
Project #:		10U13380								
Date:		9/30/2010								
Test Engineer:		MENGISTU MEKURIA								
Configuration:		EUT (INDUCTIVE COVER) WITH HEADSET AND AC ADAPTER								
Mode:		TX, CELL BAND GPRS MODE								
Chamber		Pre-amplifier		Filter		Limit				
5m Chamber A		T144 8449B		Filter 1		FCC PART 22				
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch										
1.648	-42.2	H	3.0	36.5	38.2	1.0	-42.8	-13.0	-29.8	
3.297	-48.1	H	3.0	43.9	37.1	1.0	-40.4	-13.0	-27.4	
4.121	-48.1	H	3.0	46.2	36.5	1.0	-37.4	-13.0	-24.4	
4.945	-56.0	H	3.0	48.6	36.3	1.0	-42.8	-13.0	-29.8	
7.418	-54.8	H	3.0	52.9	36.6	1.0	-37.5	-13.0	-24.5	
8.242	-55.6	H	3.0	54.0	36.8	1.0	-37.4	-13.0	-24.4	
9.066	-53.8	H	3.0	55.0	37.0	1.0	-34.7	-13.0	-21.7	
2.473	-48.1	V	3.0	41.7	37.5	1.0	-42.9	-13.0	-29.9	
3.297	-48.2	V	3.0	44.0	37.1	1.0	-40.3	-13.0	-27.3	
4.121	-47.3	V	3.0	45.9	36.5	1.0	-37.0	-13.0	-24.0	
7.418	-45.9	V	3.0	51.8	36.6	1.0	-29.6	-13.0	-16.6	
8.242	-49.5	V	3.0	52.9	36.8	1.0	-32.4	-13.0	-19.4	
9.066	-50.0	V	3.0	54.0	37.0	1.0	-32.0	-13.0	-19.0	
Mid Ch										
1.673	-40.3	H	3.0	36.8	38.1	1.0	-40.6	-13.0	-27.6	
2.510	-45.7	H	3.0	40.1	37.5	1.0	-42.0	-13.0	-29.0	
3.346	-48.2	H	3.0	44.0	37.1	1.0	-40.3	-13.0	-27.3	
4.183	-48.8	H	3.0	46.4	36.5	1.0	-38.0	-13.0	-25.0	
5.020	-56.8	H	3.0	48.8	36.3	1.0	-43.3	-13.0	-30.3	
7.529	-55.9	H	3.0	53.1	36.6	1.0	-38.4	-13.0	-25.4	
8.366	-55.3	H	3.0	54.1	36.8	1.0	-37.0	-13.0	-24.0	
9.203	-58.8	H	3.0	55.2	37.0	1.0	-39.6	-13.0	-26.6	
2.510	-45.4	V	3.0	41.9	37.5	1.0	-40.0	-13.0	-27.0	
3.346	-47.1	V	3.0	44.1	37.1	1.0	-39.1	-13.0	-26.1	
4.183	-39.5	V	3.0	46.1	36.5	1.0	-28.9	-13.0	-15.9	
5.020	-55.3	V	3.0	48.3	36.3	1.0	-42.3	-13.0	-29.3	
7.529	-47.8	V	3.0	52.0	36.6	1.0	-31.4	-13.0	-18.4	
8.366	-51.2	V	3.0	53.1	36.8	1.0	-33.9	-13.0	-20.9	
9.203	-51.2	V	3.0	54.2	37.0	1.0	-33.1	-13.0	-20.1	
High Ch										
1.698	-40.5	H	3.0	37.0	38.1	1.0	-40.5	-13.0	-27.5	
2.546	-46.9	H	3.0	40.4	37.5	1.0	-43.0	-13.0	-30.0	
3.395	-49.7	H	3.0	44.1	37.1	1.0	-41.6	-13.0	-28.6	
4.244	-51.1	H	3.0	46.6	36.5	1.0	-40.1	-13.0	-27.1	
7.639	-55.1	H	3.0	53.2	36.6	1.0	-37.5	-13.0	-24.5	
8.488	-56.4	H	3.0	54.3	36.8	1.0	-37.9	-13.0	-24.9	
9.337	-55.0	H	3.0	55.4	37.0	1.0	-35.7	-13.0	-22.7	
2.546	-45.9	V	3.0	42.0	37.5	1.0	-40.4	-13.0	-27.4	
3.395	-50.6	V	3.0	44.2	37.1	1.0	-42.4	-13.0	-29.4	
4.244	-40.4	V	3.0	46.2	36.5	1.0	-29.7	-13.0	-16.7	
7.639	-47.5	V	3.0	52.1	36.6	1.0	-31.0	-13.0	-18.0	
8.488	-51.0	V	3.0	53.2	36.8	1.0	-33.6	-13.0	-20.6	
9.337	-49.6	V	3.0	54.3	37.0	1.0	-31.3	-13.0	-18.3	
Rev. 03.03.09										
Note: No other emissions were detected within 30dB margin to the limit line.										

ERP FOR EGPRS 850 MODE (CELL BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:		PALM								
Project #:		10U13380								
Date:		9/30/2010								
Test Engineer:		MENGISTU MEKURIA								
Configuration:		EUT (INDUCTIVE COVER) WITH HEADSET AND AC ADAPTER								
Mode:		TX, CELL BAND EGPRS MODE								
Chamber		Pre-amplifier		Filter		Limit				
5m Chamber A		T144 8449B		Filter 1		FCC PART 22				
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch										
1.648	-44.9	H	3.0	36.5	38.2	1.0	-45.5	-13.0	-32.5	
4.121	-49.5	H	3.0	46.2	36.5	1.0	-38.9	-13.0	-25.9	
4.945	-61.4	H	3.0	48.6	36.3	1.0	-48.1	-13.0	-35.1	
5.769	2.1	H	3.0	50.3	36.3	1.0	17.1	-13.0	30.1	
6.594	2.9	H	3.0	51.7	36.4	1.0	19.2	-13.0	32.2	
7.418	-62.0	H	3.0	52.9	36.6	1.0	-44.6	-13.0	-31.6	
8.242	-65.4	H	3.0	54.0	36.8	1.0	-47.2	-13.0	-34.2	
9.066	-60.5	H	3.0	55.0	37.0	1.0	-41.5	-13.0	-28.5	
4.121	-54.7	V	3.0	45.9	36.5	1.0	-44.3	-13.0	-31.3	
7.418	-52.4	V	3.0	51.8	36.6	1.0	-36.2	-13.0	-23.2	
8.242	-56.9	V	3.0	52.9	36.8	1.0	-39.8	-13.0	-26.8	
9.066	-56.4	V	3.0	54.0	37.0	1.0	-38.4	-13.0	-25.4	
Mid Ch										
1.673	-43.0	H	3.0	36.8	38.1	1.0	-43.3	-13.0	-30.3	
2.510	-51.0	H	3.0	40.1	37.5	1.0	-47.3	-13.0	-34.3	
4.183	-50.3	H	3.0	46.4	36.5	1.0	-39.5	-13.0	-26.5	
7.529	-63.0	H	3.0	53.1	36.6	1.0	-45.5	-13.0	-32.5	
8.366	-65.1	H	3.0	54.1	36.8	1.0	-46.8	-13.0	-33.8	
9.203	-65.6	H	3.0	55.2	37.0	1.0	-46.4	-13.0	-33.4	
3.346	-55.2	V	3.0	44.1	37.1	1.0	-47.2	-13.0	-34.2	
4.183	-46.8	V	3.0	46.1	36.5	1.0	-36.2	-13.0	-23.2	
5.020	-6.0	V	3.0	48.3	36.3	1.0	7.0	-13.0	20.0	
5.856		V	3.0	49.7	36.3	1.0	14.4	-13.0	27.4	
6.693		V	3.0	50.9	36.4	1.0	15.4	-13.0	28.4	
7.529	-54.3	V	3.0	52.0	36.6	1.0	-37.9	-13.0	-24.9	
8.366	-58.6	V	3.0	53.1	36.8	1.0	-41.3	-13.0	-28.3	
9.203	-57.7	V	3.0	54.2	37.0	1.0	-39.5	-13.0	-26.5	
High Ch										
1.698	-47.0	H	3.0	37.0	38.1	1.0	-47.1	-13.0	-34.1	
4.244	-55.9	H	3.0	46.6	36.5	1.0	-44.9	-13.0	-31.9	
9.337	-67.6	H	3.0	55.4	37.0	1.0	-48.2	-13.0	-35.2	
4.244	-58.5	V	3.0	46.2	36.5	1.0	-47.8	-13.0	-34.8	
7.639	-58.4	V	3.0	52.1	36.6	1.0	-41.9	-13.0	-28.9	
8.488	-66.3	V	3.0	53.2	36.8	1.0	-48.9	-13.0	-35.9	
9.337	-62.6	V	3.0	54.3	37.0	1.0	-44.3	-13.0	-31.3	
Rev. 03.03.09										
Note: No other emissions were detected within 35dB margin to the limit line.										

ERP FOR UMTS REL 99 MODE (CELLULAR BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company: Palm Project #: 10U13380 Date: 9/8/10 Test Engineer: Chin Pang Configuration: EUT (Inductive Cover) with AC Adapter Mode: TX, UMTS850, REL 99 Worst Position: Z										
Chamber		Pre-amplifier		Filter		Limit				
5m Chamber A		T144 8449B		Filter 1		Part 22				
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
w Ch, 826.4MHz										
1.653	-53.0	H	3.0	36.6	38.1	1.0	-55.7	-13.0	-42.7	
2.479	-50.5	H	3.0	40.0	37.5	1.0	-49.1	-13.0	-36.1	
1.653	-51.5	V	3.0	36.9	38.1	1.0	-53.9	-13.0	-40.9	
2.479	-48.7	V	3.0	41.7	37.5	1.0	-45.6	-13.0	-32.6	
d Ch, 836.4MHz										
1.673	-54.0	H	3.0	36.8	38.1	1.0	-56.5	-13.0	-43.5	
2.509	-54.9	H	3.0	40.1	37.5	1.0	-53.4	-13.0	-40.4	
1.673	-51.0	V	3.0	37.1	38.1	1.0	-53.2	-13.0	-40.2	
2.509	-52.4	V	3.0	41.8	37.5	1.0	-49.2	-13.0	-36.2	
h Ch, 846.6MHz										
1.693	-52.0	H	3.0	37.0	38.1	1.0	-54.2	-13.0	-41.2	
2.540	-54.0	H	3.0	40.3	37.5	1.0	-52.3	-13.0	-39.3	
1.693	-52.2	V	3.0	37.3	38.1	1.0	-54.1	-13.0	-41.1	
2.540	-50.0	V	3.0	41.9	37.5	1.0	-46.7	-13.0	-33.7	
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

ERP FOR UMTS HSDPA MODE (CELLULAR BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company: Palm Project #: 10U13380 Date: 9/10/10 Test Engineer: Chin Pang Configuration: EUT (Inductive Cover) with AC Adapter Mode: TX, UMTS850, HSDPA Worst Position: Z										
Chamber		Pre-amplifier		Filter		Limit				
5m Chamber B		T145 8449B		Filter 1		Part 22				
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
v Ch, 826.4MHz										
1.653	-54.0	H	3.0	37.3	35.5	1.0	-53.4	-13.0	-40.4	
2.479	-56.7	H	3.0	39.8	35.4	1.0	-53.4	-13.0	-40.4	
1.653	-55.2	V	3.0	36.8	35.5	1.0	-55.0	-13.0	-42.0	
2.479	-53.4	V	3.0	41.7	35.4	1.0	-48.3	-13.0	-35.3	
i Ch, 836.4MHz										
1.673	-55.7	H	3.0	37.5	35.5	1.0	-54.9	-13.0	-41.9	
2.509	-58.6	H	3.0	39.9	35.4	1.0	-55.3	-13.0	-42.3	
1.673	-54.5	V	3.0	37.1	35.5	1.0	-54.1	-13.0	-41.1	
2.509	-56.3	V	3.0	41.8	35.4	1.0	-51.0	-13.0	-38.0	
h Ch, 846.6MHz										
1.693	-53.8	H	3.0	37.7	35.5	1.0	-52.8	-13.0	-39.8	
2.540	-56.0	H	3.0	40.1	35.4	1.0	-52.5	-13.0	-39.5	
1.693	-54.1	V	3.0	37.4	35.5	1.0	-53.4	-13.0	-40.4	
2.540	-53.3	V	3.0	41.9	35.4	1.0	-47.9	-13.0	-34.9	
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

EIRP FOR GSM1900 MODE (PCS BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:		PALM								
Project #:		10U13380								
Date:		9/30/2010								
Test Engineer:		MENGISTU MEKURIA								
Configuration:		EUT (INDUCTIVE COVER) WITH HEADSET AND AC ADAPTER								
Mode:		TX, PCS BAND GPRS MODE								
Chamber		Pre-amplifier			Filter			Limit		
5m Chamber A		T144 8449B			Filter 1			FCC PART 24		
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch										
3.700	-49.9	H	3.0	45.0	36.8	1.0	-40.7	-13.0	-27.7	
5.551	-54.3	H	3.0	49.9	36.3	1.0	-39.6	-13.0	-26.6	
7.401	-54.6	H	3.0	52.9	36.6	1.0	-37.3	-13.0	-24.3	
9.251	-48.0	H	3.0	55.2	37.0	1.0	-28.8	-13.0	-15.8	
11.101	-45.2	H	3.0	55.9	36.9	1.0	-25.2	-13.0	-12.2	
12.951	-53.5	H	3.0	57.2	36.0	1.0	-31.3	-13.0	-18.3	
14.802	-55.9	H	3.0	60.4	34.8	1.0	-29.3	-13.0	-16.3	
3.700	-49.9	V	3.0	44.9	36.8	1.0	-40.8	-13.0	-27.8	
5.551	-58.0	V	3.0	49.3	36.3	1.0	-44.0	-13.0	-31.0	
7.401	-52.3	V	3.0	51.8	36.6	1.0	-36.0	-13.0	-23.0	
9.251	-42.7	V	3.0	54.2	37.0	1.0	-24.5	-13.0	-11.5	
11.101	-39.6	V	3.0	56.3	36.9	1.0	-19.2	-13.0	-6.2	
12.951	-49.2	V	3.0	58.2	36.0	1.0	-26.1	-13.0	-13.1	
14.802	-54.4	V	3.0	60.1	34.8	1.0	-28.2	-13.0	-15.2	
Mid Ch										
3.760	-53.3	H	3.0	45.2	36.8	1.0	-43.9	-13.0	-30.9	
5.640	-49.0	H	3.0	50.1	36.3	1.0	-34.2	-13.0	-21.2	
7.520	-61.1	H	3.0	53.1	36.6	1.0	-43.7	-13.0	-30.7	
9.400	-44.4	H	3.0	55.4	37.0	1.0	-25.0	-13.0	-12.0	
11.280	-39.6	H	3.0	55.8	36.8	1.0	-19.7	-13.0	-6.7	
13.160	-58.2	H	3.0	57.6	35.9	1.0	-35.5	-13.0	-22.5	
15.040	-55.0	H	3.0	60.7	34.7	1.0	-28.1	-13.0	-15.1	
3.760	-48.9	V	3.0	45.1	36.8	1.0	-39.6	-13.0	-26.6	
5.640	-52.5	V	3.0	49.4	36.3	1.0	-38.4	-13.0	-25.4	
7.520	-51.8	V	3.0	52.0	36.6	1.0	-35.4	-13.0	-22.4	
9.400	-40.4	V	3.0	54.4	37.0	1.0	-22.1	-13.0	-9.1	
11.280	-40.6	V	3.0	56.5	36.8	1.0	-19.9	-13.0	-6.9	
13.160	-53.5	V	3.0	58.4	35.9	1.0	-30.0	-13.0	-17.0	
15.040	-55.1	V	3.0	60.1	34.7	1.0	-28.7	-13.0	-15.7	
High Ch										
5.729	-52.0	H	3.0	50.2	36.3	1.0	-37.1	-13.0	-24.1	
7.639	-55.4	H	3.0	53.2	36.6	1.0	-37.8	-13.0	-24.8	
9.549	-46.2	H	3.0	55.6	37.1	1.0	-26.7	-13.0	-13.7	
11.459	-45.0	H	3.0	55.7	36.8	1.0	-25.0	-13.0	-12.0	
13.369	-57.8	H	3.0	57.9	35.8	1.0	-34.6	-13.0	-21.6	
15.278	-56.1	H	3.0	60.0	34.8	1.0	-29.9	-13.0	-16.9	
5.729	-52.5	V	3.0	49.5	36.3	1.0	-38.3	-13.0	-25.3	
7.639	-47.4	V	3.0	52.1	36.6	1.0	-30.9	-13.0	-17.9	
9.549	-44.4	V	3.0	54.6	37.1	1.0	-25.9	-13.0	-12.9	
11.459	-36.3	V	3.0	56.7	36.8	1.0	-15.4	-13.0	-2.4	
13.369	-55.6	V	3.0	58.6	35.8	1.0	-31.8	-13.0	-18.8	
15.278	-54.4	V	3.0	59.5	34.8	1.0	-28.7	-13.0	-15.7	
Rev. 03.03.09										
Note: No other emissions were detected within 30dB margin to the limit line.										

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: PALM
Project #: 10U13380
Date: 9/30/2010
Test Engineer: MENGISTU MEKURIA
Configuration: EUT (INDUCTIVE COVER) WITH HEADSET AND AC ADAPTER
Mode: TX, PCS BAND EGPRS MODE

Chamber
 5m Chamber A

Pre-amplifier
 T144 8449B

Filter
 Filter 1

Limit
 FCC PART 24

f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch										
7.401	-57.0	H	3.0	52.9	36.6	1.0	-39.6	-13.0	-26.6	
9.251	-54.0	H	3.0	55.2	37.0	1.0	-34.8	-13.0	-21.8	
11.101	-54.0	H	3.0	55.9	36.9	1.0	-34.0	-13.0	-21.0	
12.951	-59.6	H	3.0	57.2	36.0	1.0	-37.4	-13.0	-24.4	
14.802	-62.9	H	3.0	60.4	34.8	1.0	-36.3	-13.0	-23.3	
3.700	-45.8	V	3.0	44.9	36.8	1.0	-36.7	-13.0	-23.7	
7.401	-57.9	V	3.0	51.8	36.6	1.0	-41.7	-13.0	-28.7	
9.251	-46.6	V	3.0	54.2	37.0	1.0	-28.4	-13.0	-15.4	
11.101	-42.8	V	3.0	56.3	36.9	1.0	-22.4	-13.0	-9.4	
12.951	-51.7	V	3.0	58.2	36.0	1.0	-28.6	-13.0	-15.6	
14.802	-54.4	V	3.0	60.1	34.8	1.0	-28.2	-13.0	-15.2	
1.5										
Mid Ch										
5.640	-54.7	H	3.0	50.1	36.3	1.0	-39.9	-13.0	-26.9	
9.400	-50.4	H	3.0	55.4	37.0	1.0	-31.0	-13.0	-18.0	
11.280	-48.4	H	3.0	55.8	36.8	1.0	-28.4	-13.0	-15.4	
13.160	-64.3	H	3.0	57.6	35.9	1.0	-41.6	-13.0	-28.6	
15.040	-62.0	H	3.0	60.7	34.7	1.0	-35.0	-13.0	-22.0	
5.640	-48.3	V	3.0	49.4	36.3	1.0	-34.2	-13.0	-21.2	
7.520	-57.3	V	3.0	52.0	36.6	1.0	-41.0	-13.0	-28.0	
9.400	-46.1	V	3.0	54.4	37.0	1.0	-27.7	-13.0	-14.7	
11.280	-44.5	V	3.0	56.5	36.8	1.0	-23.9	-13.0	-10.9	
13.160	-56.7	V	3.0	58.4	35.9	1.0	-33.2	-13.0	-20.2	
15.040	-57.6	V	3.0	60.1	34.7	1.0	-31.2	-13.0	-18.2	
1.5										
High Ch										
7.639	-60.1	H	3.0	53.2	36.6	1.0	-42.5	-13.0	-29.5	
9.549	-58.2	H	3.0	55.6	37.1	1.0	-38.7	-13.0	-25.7	
13.369	-70.0	H	3.0	57.9	35.8	1.0	-46.9	-13.0	-33.9	
15.278	-70.0	H	3.0	60.0	34.8	1.0	-43.8	-13.0	-30.8	
3.820	-73.6	V	3.0	45.2	36.7	1.0	-64.2	-13.0	-51.2	
5.729	-44.2	V	3.0	49.5	36.3	1.0	-30.0	-13.0	-17.0	
7.639	-58.4	V	3.0	52.1	36.6	1.0	-41.9	-13.0	-28.9	
9.549	-55.7	V	3.0	54.6	37.1	1.0	-37.1	-13.0	-24.1	
11.459	-44.1	V	3.0	56.7	36.8	1.0	-23.2	-13.0	-10.2	
13.369	-62.0	V	3.0	58.6	35.8	1.0	-38.2	-13.0	-25.2	
15.278	-59.4	V	3.0	59.5	34.8	1				

EIRP FOR UMTS REL 99 MODE (PCS BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement											
Company: Palm Project #: 10U13380 Date: 9/10/10 Test Engineer: Chin Pang Configuration: EUT (Inductive Cover) with AC Adapter Mode: TX, UMTS1900, Rel 99 Worst Position: X											
Chamber		Pre-amplifier		Filter		Limit					
5m Chamber B		T145 8449B		Filter 1		Part 24					
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
Low Ch											
7.410	-64.7	H	3.0	53.0	35.7	1.0	-46.4	-13.0	-33.4		
9.262	-64.6	H	3.0	55.1	35.6	1.0	-44.1	-13.0	-31.1		
7.410	-65.0	V	3.0	51.3	35.7	1.0	-48.4	-13.0	-35.4		
9.262	-64.4	V	3.0	53.6	35.6	1.0	-45.4	-13.0	-32.4		
Mid Ch											
7.520	-65.0	H	3.0	53.1	35.7	1.0	-46.6	-13.0	-33.6		
9.400	-65.1	H	3.0	55.2	35.6	1.0	-44.4	-13.0	-31.4		
7.520	-65.6	V	3.0	51.4	35.7	1.0	-48.9	-13.0	-35.9		
9.400	-64.3	V	3.0	53.7	35.6	1.0	-45.1	-13.0	-32.1		
High Ch											
7.630	-64.8	H	3.0	53.2	35.7	1.0	-46.3	-13.0	-33.3		
9.538	-65.7	H	3.0	55.4	35.6	1.0	-44.9	-13.0	-31.9		
7.630	-62.2	V	3.0	51.6	35.7	1.0	-45.3	-13.0	-32.3		
9.538	-64.1	V	3.0	53.9	35.6	1.0	-44.7	-13.0	-31.7		
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											

EIRP FOR UMTS HSDPA MODE (PCS BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company: Palm Project #: 10U13380 Date: 9/10/10 Test Engineer: Chin Pang Configuration: EUT (Inductive Cover) with AC Adapter Mode: TX, UMTS1900, HSDPA Worst Position: X										
Chamber		Pre-amplifier		Filter		Limit				
5m Chamber B		T145 8449B		Filter 1		Part 24				
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch										
5.557	-64.8	H	3.0	50.0	35.4	1.0	-49.2	-13.0	-36.2	
7.410	-64.5	H	3.0	53.0	35.7	1.0	-46.2	-13.0	-33.2	
7.410	-65.0	V	3.0	51.3	35.7	1.0	-48.4	-13.0	-35.4	
9.262	-63.2	V	3.0	53.6	35.6	1.0	-44.2	-13.0	-31.2	
Mid Ch										
7.520	-65.0	H	3.0	53.1	35.7	1.0	-46.6	-13.0	-33.6	
9.400	-64.2	H	3.0	55.2	35.6	1.0	-43.5	-13.0	-30.5	
7.520	-65.6	V	3.0	51.4	35.7	1.0	-48.9	-13.0	-35.9	
9.400	-64.3	V	3.0	53.7	35.6	1.0	-45.1	-13.0	-32.1	
High Ch										
7.630	-63.8	H	3.0	53.2	35.7	1.0	-45.3	-13.0	-32.3	
9.538	-65.0	H	3.0	55.4	35.6	1.0	-44.2	-13.0	-31.2	
7.630	-63.1	V	3.0	51.6	35.7	1.0	-46.2	-13.0	-33.2	
9.538	-64.0	V	3.0	53.9	35.6	1.0	-44.6	-13.0	-31.6	
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

EUT WITH CHARGING DOCK

ERP FOR GSM 850 MODE (CELLULAR BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement											
Company:		PALM									
Project #:		10U13380									
Date:		9/30/2010									
Test Engineer:		MENGISTU MEKURIA									
Configuration:		EUT (INDUCTIVE COVER) WITH HEADSET AND INDUCTIVE CHARGER									
Mode:		TX, CELL BAND GPRS MODE									
Chamber		Pre-amplifier		Filter		Limit					
5m Chamber A		T144 8449B		Filter 1		FCC PART 22					
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes	
Low Ch											
1.648	-39.8	H	3.0	36.5	38.2	1.0	-40.4	-13.0	-27.4		
2.473	-42.6	H	3.0	40.0	37.5	1.0	-39.1	-13.0	-26.1		
3.297	-46.2	H	3.0	43.9	37.1	1.0	-38.5	-13.0	-25.5		
4.121	-41.2	H	3.0	46.2	36.5	1.0	-30.5	-13.0	-17.5		
4.945	-52.3	H	3.0	48.6	36.3	1.0	-39.0	-13.0	-26.0		
7.418	-50.5	H	3.0	52.9	36.6	1.0	-33.2	-13.0	-20.2		
8.242	-49.6	H	3.0	54.0	36.8	1.0	-31.4	-13.0	-18.4		
9.066	-51.5	H	3.0	55.0	37.0	1.0	-32.5	-13.0	-19.5		
1.648	-42.6	V	3.0	36.8	38.2	1.0	-42.9	-13.0	-29.9		
2.473	-43.0	V	3.0	41.7	37.5	1.0	-37.8	-13.0	-24.8		
3.297	-46.9	V	3.0	44.0	37.1	1.0	-39.0	-13.0	-26.0		
4.121	-48.8	V	3.0	45.9	36.5	1.0	-38.4	-13.0	-25.4		
7.418	-43.5	V	3.0	51.8	36.6	1.0	-27.2	-13.0	-14.2		
8.242	-45.6	V	3.0	52.9	36.8	1.0	-28.4	-13.0	-15.4		
9.066	-48.3	V	3.0	54.0	37.0	1.0	-30.2	-13.0	-17.2		
Mid Ch											
1.673	-38.9	H	3.0	36.8	38.1	1.0	-39.2	-13.0	-26.2		
2.510	-41.6	H	3.0	40.1	37.5	1.0	-37.9	-13.0	-24.9		
3.346	-46.3	H	3.0	44.0	37.1	1.0	-38.4	-13.0	-25.4		
4.183	-41.9	H	3.0	46.4	36.5	1.0	-31.1	-13.0	-18.1		
5.020	-54.0	H	3.0	48.8	36.3	1.0	-40.5	-13.0	-27.5		
7.529	-51.6	H	3.0	53.1	36.6	1.0	-34.1	-13.0	-21.1		
8.366	-49.3	H	3.0	54.1	36.8	1.0	-31.0	-13.0	-18.0		
9.203	-56.6	H	3.0	55.2	37.0	1.0	-37.4	-13.0	-24.4		
1.673	-42.7	V	3.0	37.1	38.1	1.0	-42.7	-13.0	-29.7		
2.510	-40.3	V	3.0	41.9	37.5	1.0	-34.9	-13.0	-21.9		
3.346	-45.9	V	3.0	44.1	37.1	1.0	-37.8	-13.0	-24.8		
4.183	-40.9	V	3.0	46.1	36.5	1.0	-30.4	-13.0	-17.4		
5.020	-50.7	V	3.0	48.3	36.3	1.0	-37.7	-13.0	-24.7		
7.529	-45.4	V	3.0	52.0	36.6	1.0	-29.0	-13.0	-16.0		
8.366	-47.2	V	3.0	53.1	36.8	1.0	-29.9	-13.0	-16.9		
9.203	-49.5	V	3.0	54.2	37.0	1.0	-31.3	-13.0	-18.3		
High Ch											
1.698	-38.1	H	3.0	37.0	38.1	1.0	-38.2	-13.0	-25.2		
2.546	-47.9	H	3.0	40.4	37.5	1.0	-44.0	-13.0	-31.0		
3.395	-47.7	H	3.0	44.1	37.1	1.0	-39.6	-13.0	-26.6		
4.244	-44.2	H	3.0	46.6	36.5	1.0	-33.1	-13.0	-20.1		
5.093	-56.0	H	3.0	49.0	36.3	1.0	-42.2	-13.0	-29.2		
7.639	-50.8	H	3.0	53.2	36.6	1.0	-33.2	-13.0	-20.2		
8.488	-50.4	H	3.0	54.3	36.8	1.0	-31.9	-13.0	-18.9		
9.337	-52.8	H	3.0	55.4	37.0	1.0	-33.4	-13.0	-20.4		
1.698	-43.1	V	3.0	37.4	38.1	1.0	-42.8	-13.0	-29.8		
2.546	-40.8	V	3.0	42.0	37.5	1.0	-35.3	-13.0	-22.3		
3.395	-50.3	V	3.0	44.2	37.1	1.0	-42.1	-13.0	-29.1		
4.244	-41.9	V	3.0	46.2	36.5	1.0	-31.1	-13.0	-18.1		
5.093	-55.4	V	3.0	48.5	36.3	1.0	-42.1	-13.0	-29.1		
6.790	-57.1	V	3.0	51.0	36.5	1.0	-41.6	-13.0	-28.6		
7.639	-45.1	V	3.0	52.1	36.6	1.0	-28.6	-13.0	-15.6		
8.488	-47.0	V	3.0	53.2	36.8	1.0	-29.6	-13.0	-16.6		
9.337	-47.9	V	3.0	54.3	37.0	1.0	-29.6	-13.0	-16.6		
Rev. 03.03.09											
Note: No other emissions were detected within 30dB margin to the limit line.											

ERP FOR EGPRS 850 MODE (CELL BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:		PALM								
Project #:		10U13380								
Date:		9/30/2010								
Test Engineer:		MENGISTU MEKURIA								
Configuration:		EUT (INDUCTIVE COVER) WITH HEADSET AND INDUCTIVE CHARGER								
Mode:		TX, CELL BAND EGPRS MODE								
Chamber		Pre-amplifier			Filter			Limit		
5m Chamber A		T144 8449B			Filter 1			FCC PART 22		
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch										
1.648	45.3	H	3.0	36.5	38.2	1.0	45.9	-13.0	-32.9	
2.473	51.4	H	3.0	40.0	37.5	1.0	47.9	-13.0	-34.9	
3.297	52.5	H	3.0	43.9	37.1	1.0	44.8	-13.0	-31.8	
4.121	47.4	H	3.0	46.2	36.5	1.0	36.8	-13.0	-23.8	
4.945	57.8	H	3.0	48.6	36.3	1.0	44.5	-13.0	-31.5	
7.418	54.4	H	3.0	52.9	36.6	1.0	37.1	-13.0	-24.1	
8.242	57.5	H	3.0	54.0	36.8	1.0	39.3	-13.0	-26.3	
9.066	53.2	H	3.0	55.0	37.0	1.0	34.2	-13.0	-21.2	
1.648	48.4	V	3.0	36.8	38.2	1.0	48.7	-13.0	-35.7	
3.297	54.8	V	3.0	44.0	37.1	1.0	46.9	-13.0	-33.9	
4.121	54.8	V	3.0	45.9	36.5	1.0	44.4	-13.0	-31.4	
7.418	47.6	V	3.0	51.8	36.6	1.0	31.4	-13.0	-18.4	
8.242	52.0	V	3.0	52.9	36.8	1.0	34.8	-13.0	-21.8	
9.066	54.0	V	3.0	54.0	37.0	1.0	36.0	-13.0	-23.0	
Mid Ch										
1.673	43.4	H	3.0	36.8	38.1	1.0	43.7	-13.0	-30.7	
2.510	50.5	H	3.0	40.1	37.5	1.0	46.8	-13.0	-33.8	
3.346	52.6	H	3.0	44.0	37.1	1.0	44.7	-13.0	-31.7	
4.183	48.2	H	3.0	46.4	36.5	1.0	37.3	-13.0	-24.3	
5.020	59.6	H	3.0	48.8	36.3	1.0	46.0	-13.0	-33.0	
7.529	55.5	H	3.0	53.1	36.6	1.0	38.0	-13.0	-25.0	
8.366	57.2	H	3.0	54.1	36.8	1.0	38.9	-13.0	-25.9	
9.203	58.2	H	3.0	55.2	37.0	1.0	39.1	-13.0	-26.1	
1.673	46.4	V	3.0	37.1	38.1	1.0	46.4	-13.0	-33.4	
2.510	54.2	V	3.0	41.9	37.5	1.0	48.9	-13.0	-35.9	
3.346	53.8	V	3.0	44.1	37.1	1.0	45.7	-13.0	-32.7	
4.183	46.9	V	3.0	46.1	36.5	1.0	36.4	-13.0	-23.4	
5.020	60.2	V	3.0	48.3	36.3	1.0	47.2	-13.0	-34.2	
7.529	49.5	V	3.0	52.0	36.6	1.0	33.1	-13.0	-20.1	
8.366	53.6	V	3.0	53.1	36.8	1.0	36.4	-13.0	-23.4	
9.203	55.3	V	3.0	54.2	37.0	1.0	37.1	-13.0	-24.1	
High Ch										
1.698	43.6	H	3.0	37.0	38.1	1.0	43.6	-13.0	-30.6	
3.395	54.1	H	3.0	44.1	37.1	1.0	46.0	-13.0	-33.0	
4.244	50.4	H	3.0	46.6	36.5	1.0	39.4	-13.0	-26.4	
5.093	62.5	H	3.0	49.0	36.3	1.0	48.7	-13.0	-35.7	
7.639	54.7	H	3.0	53.2	36.6	1.0	37.1	-13.0	-24.1	
8.488	58.3	H	3.0	54.3	36.8	1.0	39.8	-13.0	-26.8	
9.337	54.5	H	3.0	55.4	37.0	1.0	35.1	-13.0	-22.1	
1.698	46.9	V	3.0	37.4	38.1	1.0	46.6	-13.0	-33.6	
4.244	47.8	V	3.0	46.2	36.5	1.0	37.1	-13.0	-24.1	
6.790	60.6	V	3.0	51.0	36.5	1.0	45.0	-13.0	-32.0	
7.639	49.2	V	3.0	52.1	36.6	1.0	32.7	-13.0	-19.7	
8.488	53.4	V	3.0	53.2	36.8	1.0	36.0	-13.0	-23.0	
9.337	53.7	V	3.0	54.3	37.0	1.0	35.4	-13.0	-22.4	
Rev. 03.03.09 Note: No other emissions were detected within 35dB margin to the limit line.										

ERP FOR UMTS REL 99 MODE (CELLULAR BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company: Palm Project #: 10U13380 Date: 9/10/10 Test Engineer: Chin Pang Configuration: EUT (Inductive Cover) with Charging Dock Mode: TX, UMTS850, Rel 99										
Chamber		Pre-amplifier		Filter		Limit				
5m Chamber B		T145 8449B		Filter 1		Part 22				
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
w Ch, 826.4MHz										
1.653	-53.5	H	3.0	37.3	35.5	1.0	-52.9	-13.0	-39.9	
2.479	-58.2	H	3.0	39.8	35.4	1.0	-54.9	-13.0	-41.9	
1.653	-54.7	V	3.0	36.8	35.5	1.0	-54.5	-13.0	-41.5	
2.479	-58.0	V	3.0	41.7	35.4	1.0	-52.9	-13.0	-39.9	
d Ch, 836.4MHz										
1.673	-56.0	H	3.0	37.5	35.5	1.0	-55.2	-13.0	-42.2	
2.509	-59.0	H	3.0	39.9	35.4	1.0	-55.7	-13.0	-42.7	
1.673	-54.2	V	3.0	37.1	35.5	1.0	-53.8	-13.0	-40.8	
2.509	-58.7	V	3.0	41.8	35.4	1.0	-53.4	-13.0	-40.4	
h Ch, 846.6MHz										
1.693	-52.0	H	3.0	37.7	35.5	1.0	-51.0	-13.0	-38.0	
2.540	-60.0	H	3.0	40.1	35.4	1.0	-56.5	-13.0	-43.5	
1.693	-53.5	V	3.0	37.4	35.5	1.0	-52.8	-13.0	-39.8	
2.540	-58.1	V	3.0	41.9	35.4	1.0	-52.7	-13.0	-39.7	
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

ERP FOR UMTS HSDPA MODE (CELLULAR BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company: Palm Project #: 10U13380 Date: 9/10/10 Test Engineer: Chin Pang Configuration: EUT (Inductive Cover) with Charging Dock Mode: TX, UMTS850, HSDPA										
Chamber		Pre-amplifier		Filter		Limit				
5m Chamber B		T145 8449B		Filter 1		Part 22				
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
w Ch, 826.4MHz										
1.653	-53.0	H	3.0	37.3	35.5	1.0	-52.4	-13.0	-39.4	
2.479	-57.0	H	3.0	39.8	35.4	1.0	-53.7	-13.0	-40.7	
1.653	-54.1	V	3.0	36.8	35.5	1.0	-53.9	-13.0	-40.9	
2.479	-54.5	V	3.0	41.7	35.4	1.0	-49.4	-13.0	-36.4	
d Ch, 836.4MHz										
1.673	-55.2	H	3.0	37.5	35.5	1.0	-54.4	-13.0	-41.4	
2.509	-53.2	H	3.0	39.9	35.4	1.0	-49.9	-13.0	-36.9	
1.673	-55.0	V	3.0	37.1	35.5	1.0	-54.6	-13.0	-41.6	
2.509	-54.0	V	3.0	41.8	35.4	1.0	-48.7	-13.0	-35.7	
h Ch, 846.6MHz										
1.693	-53.0	H	3.0	37.7	35.5	1.0	-52.0	-13.0	-39.0	
2.540	-57.6	H	3.0	40.1	35.4	1.0	-54.1	-13.0	-41.1	
1.693	-52.0	V	3.0	37.4	35.5	1.0	-51.3	-13.0	-38.3	
2.540	-55.8	V	3.0	41.9	35.4	1.0	-50.4	-13.0	-37.4	
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.										

EIRP FOR GSM1900 MODE (PCS BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:		PALM								
Project #:		10U13380								
Date:		9/30/2010								
Test Engineer:		MENGISTU MEKURIA								
Configuration:		EUT (INDUCTIVE COVER) WITH HEADSET AND INDUCTIVE CHARGER								
Mode:		TX, PCS BAND GPRS MODE								
Chamber		Pre-amplifier			Filter			Limit		
5m Chamber A		T144 8449B			Filter 1			FCC PART 24		
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch										
3.700	49.9	H	3.0	45.0	36.8	1.0	40.7	-13.0	-27.7	
5.551	54.3	H	3.0	49.9	36.3	1.0	39.6	-13.0	-26.6	
7.401	54.6	H	3.0	52.9	36.6	1.0	37.3	-13.0	-24.3	
9.251	48.0	H	3.0	55.2	37.0	1.0	28.8	-13.0	-15.8	
11.101	45.2	H	3.0	55.9	36.9	1.0	25.2	-13.0	-12.2	
12.951	53.5	H	3.0	57.2	36.0	1.0	31.3	-13.0	-18.3	
14.802	55.9	H	3.0	60.4	34.8	1.0	29.3	-13.0	-16.3	
16.652	49.9	V	3.0	55.8	35.4	1.0	28.5	-13.0	-15.5	
3.700	49.9	V	3.0	44.9	36.8	1.0	40.8	-13.0	-27.8	
5.551	58.0	V	3.0	49.3	36.3	1.0	44.0	-13.0	-31.0	
7.401	52.3	V	3.0	51.8	36.6	1.0	36.0	-13.0	-23.0	
9.251	42.7	V	3.0	54.2	37.0	1.0	24.5	-13.0	-11.5	
11.101	39.6	V	3.0	56.3	36.9	1.0	19.2	-13.0	-6.2	
12.951	49.2	V	3.0	58.2	36.0	1.0	26.1	-13.0	-13.1	
14.802	54.4	V	3.0	60.1	34.8	1.0	28.2	-13.0	-15.2	
Mid Ch										
3.760	53.3	H	3.0	45.2	36.8	1.0	43.9	-13.0	-30.9	
5.640	49.0	H	3.0	50.1	36.3	1.0	34.2	-13.0	-21.2	
7.520	61.1	H	3.0	53.1	36.6	1.0	43.7	-13.0	-30.7	
9.400	44.4	H	3.0	55.4	37.0	1.0	25.0	-13.0	-12.0	
11.280	39.6	H	3.0	55.8	36.8	1.0	19.7	-13.0	-6.7	
13.160	58.2	H	3.0	57.6	35.9	1.0	35.5	-13.0	-22.5	
15.040	55.0	H	3.0	60.7	34.7	1.0	28.1	-13.0	-15.1	
3.760	48.9	V	3.0	45.1	36.8	1.0	39.6	-13.0	-26.6	
5.640	52.5	V	3.0	49.4	36.3	1.0	38.4	-13.0	-25.4	
7.520	51.8	V	3.0	52.0	36.6	1.0	35.4	-13.0	-22.4	
9.400	40.4	V	3.0	54.4	37.0	1.0	22.1	-13.0	-9.1	
11.280	40.6	V	3.0	56.5	36.8	1.0	19.9	-13.0	-6.9	
13.160	53.5	V	3.0	58.4	35.9	1.0	30.0	-13.0	-17.0	
15.040	55.1	V	3.0	60.1	34.7	1.0	28.7	-13.0	-15.7	
High Ch										
5.729	52.0	H	3.0	50.2	36.3	1.0	37.1	-13.0	-24.1	
7.639	55.4	H	3.0	53.2	36.6	1.0	37.8	-13.0	-24.8	
9.549	46.2	H	3.0	55.6	37.1	1.0	26.7	-13.0	-13.7	
11.459	45.0	H	3.0	55.7	36.8	1.0	25.0	-13.0	-12.0	
13.369	57.8	H	3.0	57.9	35.8	1.0	34.6	-13.0	-21.6	
15.278	56.1	H	3.0	60.0	34.8	1.0	29.9	-13.0	-16.9	
5.729	52.5	V	3.0	49.5	36.3	1.0	38.3	-13.0	-25.3	
7.639	47.4	V	3.0	52.1	36.6	1.0	30.9	-13.0	-17.9	
9.549	44.4	V	3.0	54.6	37.1	1.0	25.9	-13.0	-12.9	
11.459	36.3	V	3.0	56.7	36.8	1.0	15.4	-13.0	-2.4	
13.369	55.6	V	3.0	58.6	35.8	1.0	31.8	-13.0	-18.8	
15.278	54.4	V	3.0	59.5	34.8	1.0	28.7	-13.0	-15.7	
Rev. 03.03.09										
Note: No other emissions were detected within 30dB margin to the limit line.										

EIRP FORE GPRS1900 MODE (PCS BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement										
Company:		PALM								
Project #:		10U13380								
Date:		9/30/2010								
Test Engineer:		MENGISTU MEKURIA								
Configuration:		EUT (INDUCTIVE COVER) WITH HEADSET AND INDUCTIVE CHARGER								
Mode:		TX, CELL BAND EGPRS MODE								
Chamber		Pre-amplifier			Filter			Limit		
5m Chamber A		T144 8449B			Filter 1			FCC PART 24		
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch										
3.700	-52.0	H	3.0	45.0	36.8	1.0	-42.8	-13.0	-29.8	
5.551	-59.8	H	3.0	49.9	36.3	1.0	-45.2	-13.0	-32.2	
7.401	-58.6	H	3.0	52.9	36.6	1.0	-41.3	-13.0	-28.3	
9.251	-47.2	H	3.0	55.2	37.0	1.0	-28.0	-13.0	-15.0	
11.101	-52.0	H	3.0	55.9	36.9	1.0	-32.0	-13.0	-19.0	
12.951	-53.8	H	3.0	57.2	36.0	1.0	-31.6	-13.0	-18.6	
14.802	-61.5	H	3.0	60.4	34.8	1.0	-34.9	-13.0	-21.9	
16.652	-54.6	V	3.0	55.8	35.4	1.0	-33.2	-13.0	-20.2	
3.700	-54.8	V	3.0	44.9	36.8	1.0	-45.7	-13.0	-32.7	
5.551	-66.0	V	3.0	49.3	36.3	1.0	-52.0	-13.0	-39.0	
7.401	-57.7	V	3.0	51.8	36.6	1.0	-41.5	-13.0	-28.5	
9.251	-46.0	V	3.0	54.2	37.0	1.0	-27.8	-13.0	-14.8	
11.101	-42.5	V	3.0	56.3	36.9	1.0	-22.1	-13.0	-9.1	
12.951	-53.7	V	3.0	58.2	36.0	1.0	-30.5	-13.0	-17.5	
14.802	-54.4	V	3.0	60.1	34.8	1.0	-28.2	-13.0	-15.2	
Mid Ch										
3.760	-55.3	H	3.0	45.2	36.8	1.0	-45.9	-13.0	-32.9	
5.640	-54.5	H	3.0	50.1	36.3	1.0	-39.7	-13.0	-26.7	
9.400	-43.6	H	3.0	55.4	37.0	1.0	-24.2	-13.0	-11.2	
11.280	-46.4	H	3.0	55.8	36.8	1.0	-26.5	-13.0	-13.5	
13.160	-58.5	H	3.0	57.6	35.9	1.0	-35.8	-13.0	-22.8	
15.040	-60.6	H	3.0	60.7	34.7	1.0	-33.6	-13.0	-20.6	
3.760	-53.5	V	3.0	45.1	36.8	1.0	-44.3	-13.0	-31.3	
5.640	-57.3	V	3.0	49.4	36.3	1.0	-43.2	-13.0	-30.2	
7.520	-59.8	V	3.0	52.0	36.6	1.0	-43.4	-13.0	-30.4	
9.400	-45.9	V	3.0	54.4	37.0	1.0	-27.5	-13.0	-14.5	
11.280	-43.9	V	3.0	56.5	36.8	1.0	-23.3	-13.0	-10.3	
13.160	-56.3	V	3.0	58.4	35.9	1.0	-32.8	-13.0	-19.8	
15.040	-59.5	V	3.0	60.1	34.7	1.0	-33.1	-13.0	-20.1	
High Ch										
5.729	-57.5	H	3.0	50.2	36.3	1.0	-42.6	-13.0	-29.6	
7.639	-59.4	H	3.0	53.2	36.6	1.0	-41.8	-13.0	-28.8	
9.549	-45.5	H	3.0	55.6	37.1	1.0	-25.9	-13.0	-12.9	
11.459	-51.8	H	3.0	55.7	36.8	1.0	-31.8	-13.0	-18.8	
13.369	-58.1	H	3.0	57.9	35.8	1.0	-35.0	-13.0	-22.0	
15.278	-61.7	H	3.0	60.0	34.8	1.0	-35.4	-13.0	-22.4	
3.820	-62.8	V	3.0	45.2	36.7	1.0	-53.3	-13.0	-40.3	
5.729	-57.4	V	3.0	49.5	36.3	1.0	-43.1	-13.0	-30.1	
7.639	-55.4	V	3.0	52.1	36.6	1.0	-38.9	-13.0	-25.9	
9.549	-49.8	V	3.0	54.6	37.1	1.0	-31.3	-13.0	-18.3	
11.459	-39.6	V	3.0	56.7	36.8	1.0	-18.7	-13.0	-5.7	
13.369	-58.5	V	3.0	58.6	35.8	1.0	-34.6	-13.0	-21.6	
15.278	-58.8	V	3.0	59.5	34.8	1.0	-33.2	-13.0	-20.2	
Rev. 03.03.09										
Note: No other emissions were detected within 30dB margin to the limit line.										

EIRP FOR UMTS REL 99 MODE (PCS BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement											
Company: Palm Project #: 10U13380 Date: 9/10/10 Test Engineer: Chin Pang Configuration: EUT (Inductive Cover) with Charging Dock Mode: TX, UMTS1900, REL99											
Chamber			Pre-amplifier			Filter			Limit		
5m Chamber B			T145 8449B			Filter 1			Part 24		
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
Low Ch											
3.705	-62.0	H	3.0	45.3	35.4	1.0	-51.0	-13.0	-38.0		
7.410	-63.5	H	3.0	53.0	35.7	1.0	-45.2	-13.0	-32.2		
3.705	-63.3	V	3.0	45.1	35.4	1.0	-52.5	-13.0	-39.5		
7.410	-64.0	V	3.0	51.3	35.7	1.0	-47.4	-13.0	-34.4		
Mid Ch											
3.760	-62.2	H	3.0	45.5	35.3	1.0	-51.0	-13.0	-38.0		
7.520	-63.0	H	3.0	53.1	35.7	1.0	-44.6	-13.0	-31.6		
3.760	-65.0	V	3.0	45.3	35.3	1.0	-54.1	-13.0	-41.1		
7.520	-60.0	V	3.0	51.4	35.7	1.0	-43.3	-13.0	-30.3		
High Ch											
7.630	-63.0	H	3.0	53.2	35.7	1.0	-44.5	-13.0	-31.5		
9.538	-63.8	H	3.0	55.4	35.6	1.0	-43.0	-13.0	-30.0		
5.723	-64.0	V	3.0	49.4	35.4	1.0	-49.1	-13.0	-36.1		
7.630	-60.0	V	3.0	51.6	35.7	1.0	-43.1	-13.0	-30.1		
9.538	-62.0	V	3.0	53.9	35.6	1.0	-42.6	-13.0	-29.6		
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											

EIRP FOR UMTS HSDPA MODE (PCS BAND)

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement											
Company: Palm Project #: 10U13380 Date: 9/10/10 Test Engineer: Chin Pang Configuration: EUT (Inductive Cover) with Charging Dock Mode: TX, UMTS1900, HSDPA											
Chamber		Pre-amplifier		Filter		Limit					
5m Chamber B		T145 8449B		Filter 1		Part 24					
f GHz	SA reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Path Loss (dB)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
Low Ch											
5.557	-65.0	H	3.0	50.0	35.4	1.0	-49.4	-13.0	-36.4		
7.410	-64.1	H	3.0	53.0	35.7	1.0	-45.8	-13.0	-32.8		
7.400	-65.0	V	3.0	51.3	35.7	1.0	-48.4	-13.0	-35.4		
9.262	-63.0	V	3.0	53.6	35.6	1.0	-44.0	-13.0	-31.0		
Mid Ch											
7.520	-65.0	H	3.0	53.1	35.7	1.0	-46.6	-13.0	-33.6		
9.400	-64.2	H	3.0	55.2	35.6	1.0	-43.5	-13.0	-30.5		
7.520	-63.1	V	3.0	51.4	35.7	1.0	-46.4	-13.0	-33.4		
9.400	-62.6	V	3.0	53.7	35.6	1.0	-43.4	-13.0	-30.4		
High Ch											
7.630	-63.7	H	3.0	53.2	35.7	1.0	-45.2	-13.0	-32.2		
9.538	-63.5	H	3.0	55.4	35.6	1.0	-42.7	-13.0	-29.7		
5.723	-64.0	V	3.0	49.4	35.4	1.0	-49.1	-13.0	-36.1		
7.630	-60.0	V	3.0	51.6	35.7	1.0	-43.1	-13.0	-30.1		
9.538	-62.0	V	3.0	53.9	35.6	1.0	-42.6	-13.0	-29.6		
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.											

8.3. RECEIVER SPURIOUS EMISSIONS

LIMIT

RSS-Gen 7.2.2

Spurious Emission Limits for Receivers:

Spurious Frequency (MHz)	Field Strength (microvolts/m at 3 metres)
30-88	100
88-216	150
216-960	200
Above 960	500

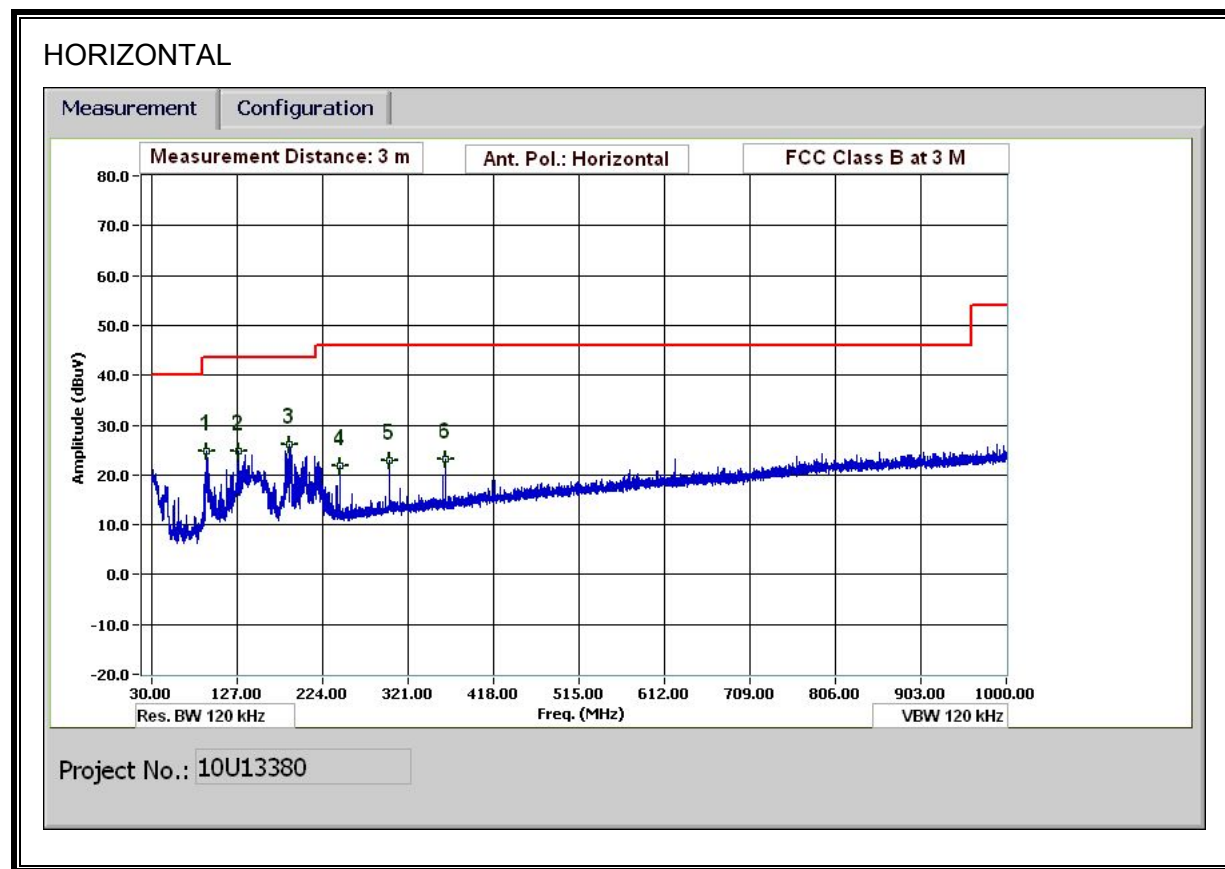
TEST PROCEDURE

The search for spurious emissions shall be from the lowest frequency internally generated or used in the receiver (local oscillator frequency, intermediate frequency or carrier frequency), or 30 MHz, whichever is the higher, to at least 3 times the highest tunable and local oscillator frequencies.

RESULTS

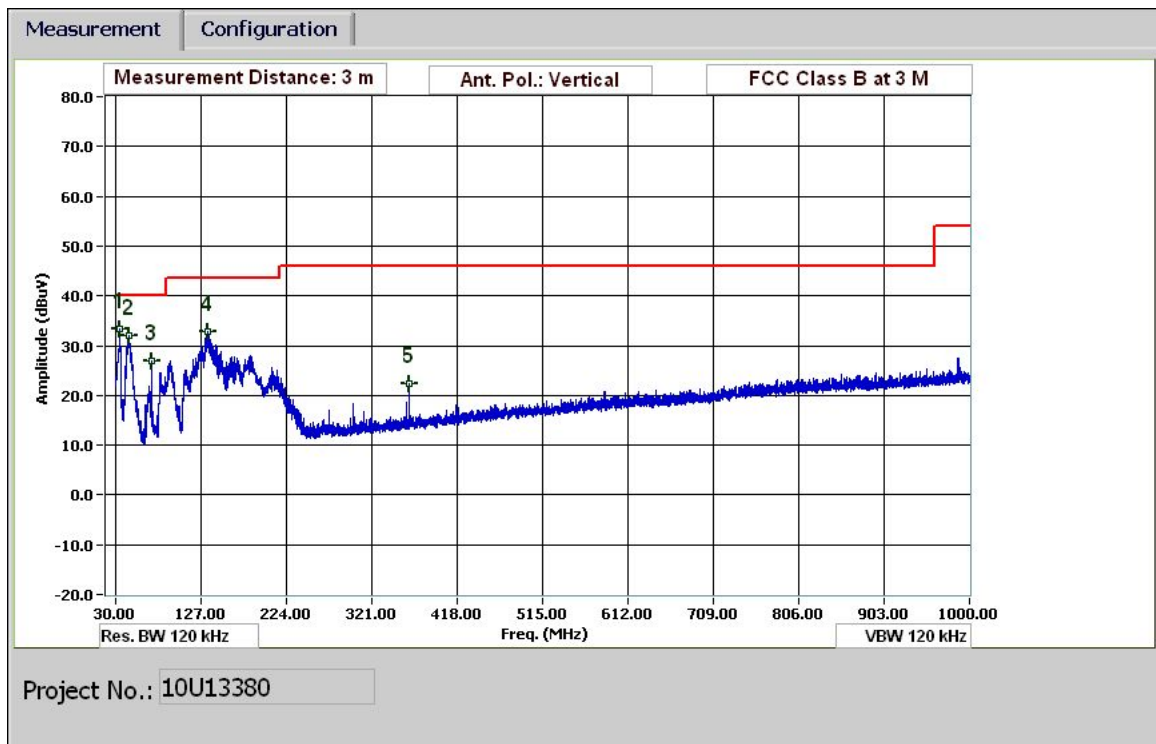
EUT WITH AC ADAPTER

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



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

VERTICAL



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

30-1000MHz Frequency Measurement

Compliance Certification Services, Fremont 5m Chamber

Test Engr: Mengistu Mekuria
Date: 09/29/10
Project #: 10U13380
Company: Palm
Test Target: FCC Class B
Mode Oper: Tx Worst Case (AC Adapter HeadSet)

f Measurement Frequency Amp Preamp Gain Margin Margin vs. Limit
Dist Distance to Antenna D Corr Distance Correct to 3 meters
Read Analyzer Reading Filter Filter Insert Loss
AF Antenna Factor Corr Calculated Field Strength
CL Cable Loss Limit Field Strength Limit

f MHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Pad dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
34.56	3.0	44.3	18.3	0.5	29.7	0.0	0.0	33.5	40.0	-6.5	V	P	
45.241	3.0	50.2	10.9	0.6	29.6	0.0	0.0	32.1	40.0	-7.9	V	P	
71.042	3.0	47.7	8.2	0.7	29.6	0.0	0.0	27.0	40.0	-13.0	V	P	
134.404	3.0	47.7	13.5	1.0	29.4	0.0	0.0	32.8	43.5	-10.7	V	P	
363.974	3.0	35.3	14.4	1.8	29.1	0.0	0.0	22.4	46.0	-23.6	V	P	
92.523	3.0	45.2	8.2	0.9	29.6	0.0	0.0	24.6	43.5	-18.9	H	P	
128.404	3.0	39.6	13.7	1.0	29.4	0.0	0.0	24.9	43.5	-18.6	H	P	
186.126	3.0	42.7	11.1	1.2	29.0	0.0	0.0	26.0	43.5	-17.5	H	P	
243.369	3.0	37.5	11.8	1.4	28.8	0.0	0.0	21.9	46.0	-24.1	H	P	
300.011	3.0	36.7	13.3	1.6	28.8	0.0	0.0	22.8	46.0	-23.2	H	P	
363.974	3.0	36.1	14.4	1.8	29.1	0.0	0.0	23.1	46.0	-22.9	H	P	

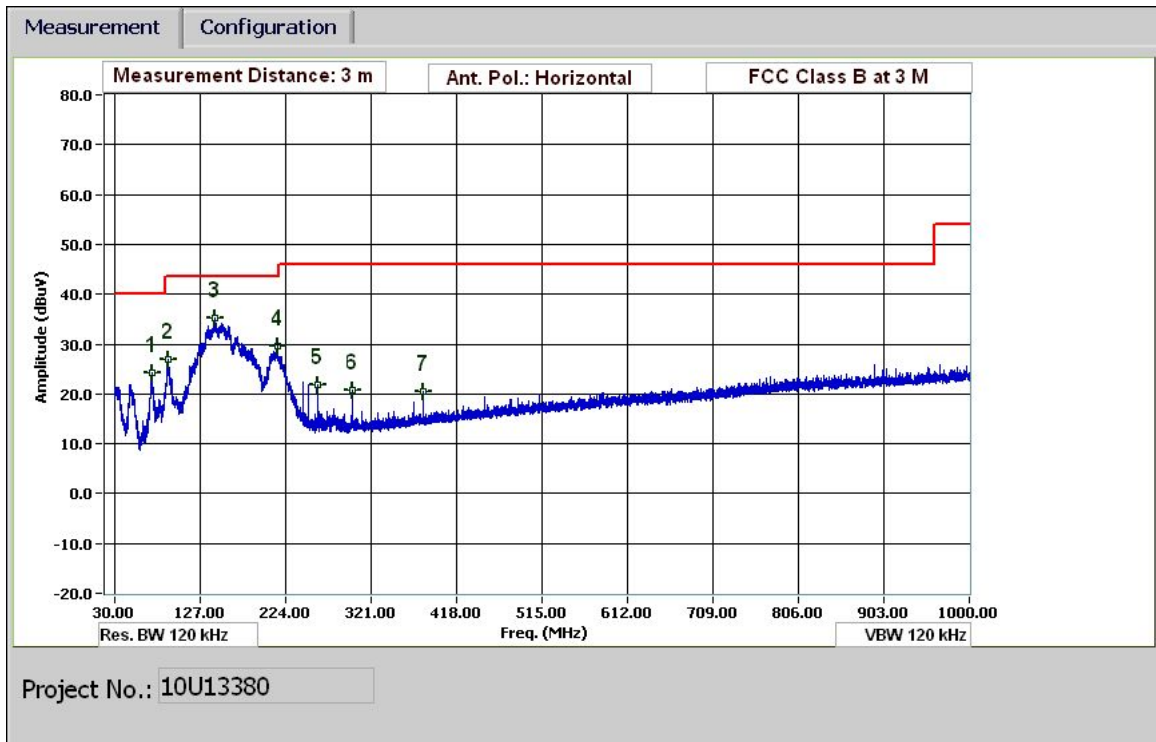
Rev. 1.27.09

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

EUT WITH AC INDUCTIV CHARGER

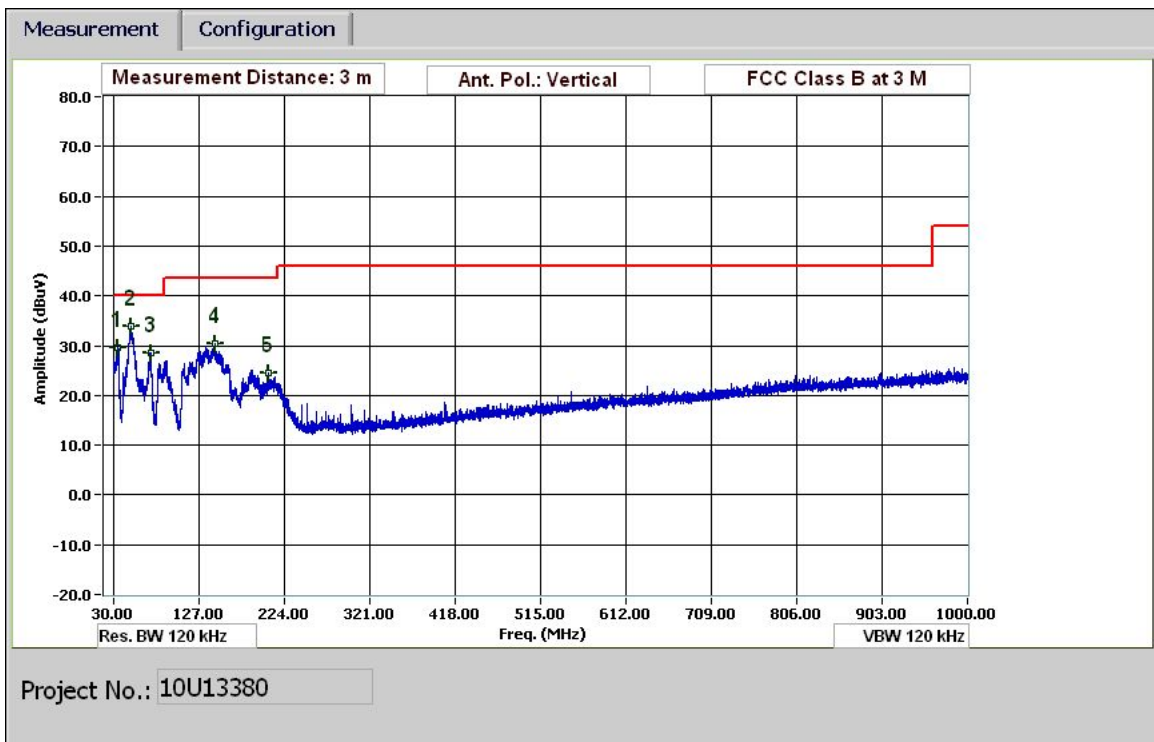
SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

HORIZONTAL



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

VERTICAL



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

30-1000MHz Frequency Measurement

Compliance Certification Services, Fremont 5m Chamber

Test Engr: Mengistu Mekuria
Date: 09/29/10
Project #: 10U13380
Company: Palm
Test Target: FCC Class B
Mode Oper: Tx Worst Case (Inductive Charger and Headset))

f Measurement Frequency Amp Preamp Gain Margin Margin vs. Limit
Dist Distance to Antenna D Corr Distance Correct to 3 meters
Read Analyzer Reading Filter Filter Insert Loss
AF Antenna Factor Corr. Calculated Field Strength
CL Cable Loss Limit Field Strength Limit

f MHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Pad dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
72.002	3.0	45.1	8.1	0.7	29.6	0.0	0.0	24.3	40.0	-15.7	H	P	
90.122	3.0	48.0	7.6	0.9	29.6	0.0	0.0	26.8	43.5	-16.7	H	P	
144.245	3.0	50.5	13.0	1.1	29.3	0.0	0.0	35.2	43.5	-8.3	H	P	
214.808	3.0	45.2	11.9	1.3	28.9	0.0	0.0	29.6	43.5	-13.9	H	P	
260.049	3.0	37.1	12.1	1.5	28.8	0.0	0.0	21.9	46.0	-24.1	H	P	
300.011	3.0	34.7	13.3	1.6	28.8	0.0	0.0	20.8	46.0	-25.2	H	P	
380.054	3.0	33.2	14.7	1.8	29.2	0.0	0.0	20.5	46.0	-25.5	H	P	
348	3.0	40.6	18.1	0.5	29.7	0.0	0.0	29.7	40.0	-10.4	V	P	
50.401	3.0	54.9	8.0	0.6	29.6	0.0	0.0	33.9	40.0	-6.1	V	P	
71.762	3.0	49.3	8.1	0.7	29.6	0.0	0.0	28.6	40.0	-11.4	V	P	
145.205	3.0	45.8	12.9	1.1	29.3	0.0	0.0	30.4	43.5	-13.1	V	P	
206.407	3.0	40.1	12.0	1.3	28.9	0.0	0.0	24.5	43.5	-19.0	V	P	

Rev. 1.27.09

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

SPURIOUS EMISSIONS ABOVE 1000 MHz (WORST-CASE CONFIGURATION)

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

8.4. POWER LINE CONDUCTED EMISSION

LIMIT

RSS-Gen 7.2.2

Except when the requirements applicable to a given device state otherwise, for any licence-exempt radio communication device equipped to operate from the public utility AC power supply, either directly or indirectly, the radio frequency voltage that is conducted back onto the AC power lines in the frequency range of 0.15 MHz to 30 MHz shall not exceed the limits shown in Table 2. The tighter limit applies at the frequency range boundaries.

Table 2 – AC Power Lines Conducted Emission Limits

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.

RESULTS

6 WORST EMISSIONS

EUT WITH AC ADAPTER

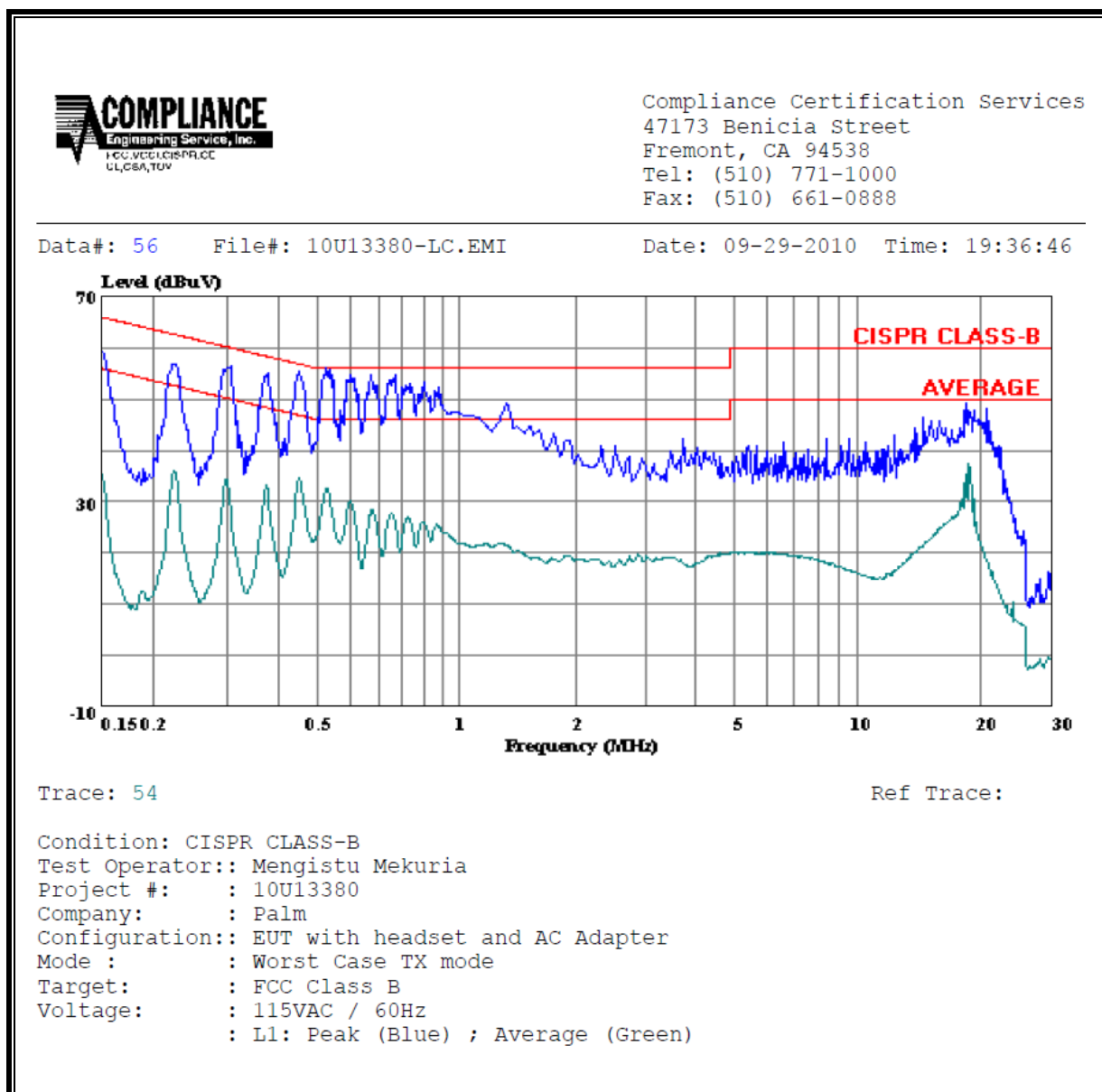
CONDUCTED EMISSIONS DATA (115VAC 50Hz)									
Freq.	Reading			Closs	Limit	EN_B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.45	55.35	49.10	34.71	0.00	56.89	46.89	-7.79	-12.18	L1
0.52	56.06	48.20	32.60	0.00	56.00	46.00	-7.80	-13.40	L1
0.68	54.87	43.70	28.48	0.00	56.00	46.00	-12.30	-17.52	L1
0.53	54.04	--	36.69	0.00	56.00	46.00	-1.96	-9.31	L2
0.60	54.12	--	31.70	0.00	56.00	46.00	-1.88	-14.30	L2
0.68	52.92	--	30.50	0.00	56.00	46.00	-3.08	-15.50	L2
6 Worst Data									

EUT WITH INDUCTIVE CHARGER

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
0.69	54.16	--	32.34	0.00	56.00	46.00	-1.84	-13.66	L1
0.76	54.58	--	32.08	0.00	56.00	46.00	-1.42	-13.92	L1
0.95	53.76	--	36.00	0.00	56.00	46.00	-2.24	-10.00	L1
0.30	54.53	--	37.69	0.00	60.16	50.16	-5.63	-12.47	L2
0.46	53.85	--	35.80	0.00	56.77	46.77	-2.92	-10.97	L2
0.53	52.65	--	37.38	0.00	56.00	46.00	-3.35	-8.62	L2
6 Worst Data									

EUT WITH AC ADAPTER

LINE 1 RESULTS



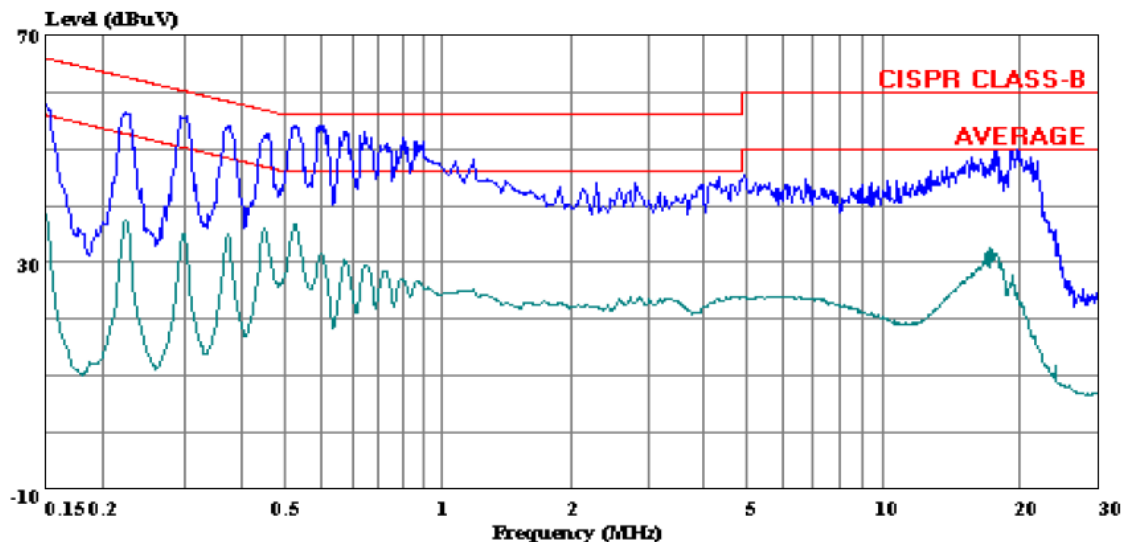
LINE 2 RESULTS



Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 49 File#: 10U13380-LC.EMI

Date: 09-29-2010 Time: 19:31:37



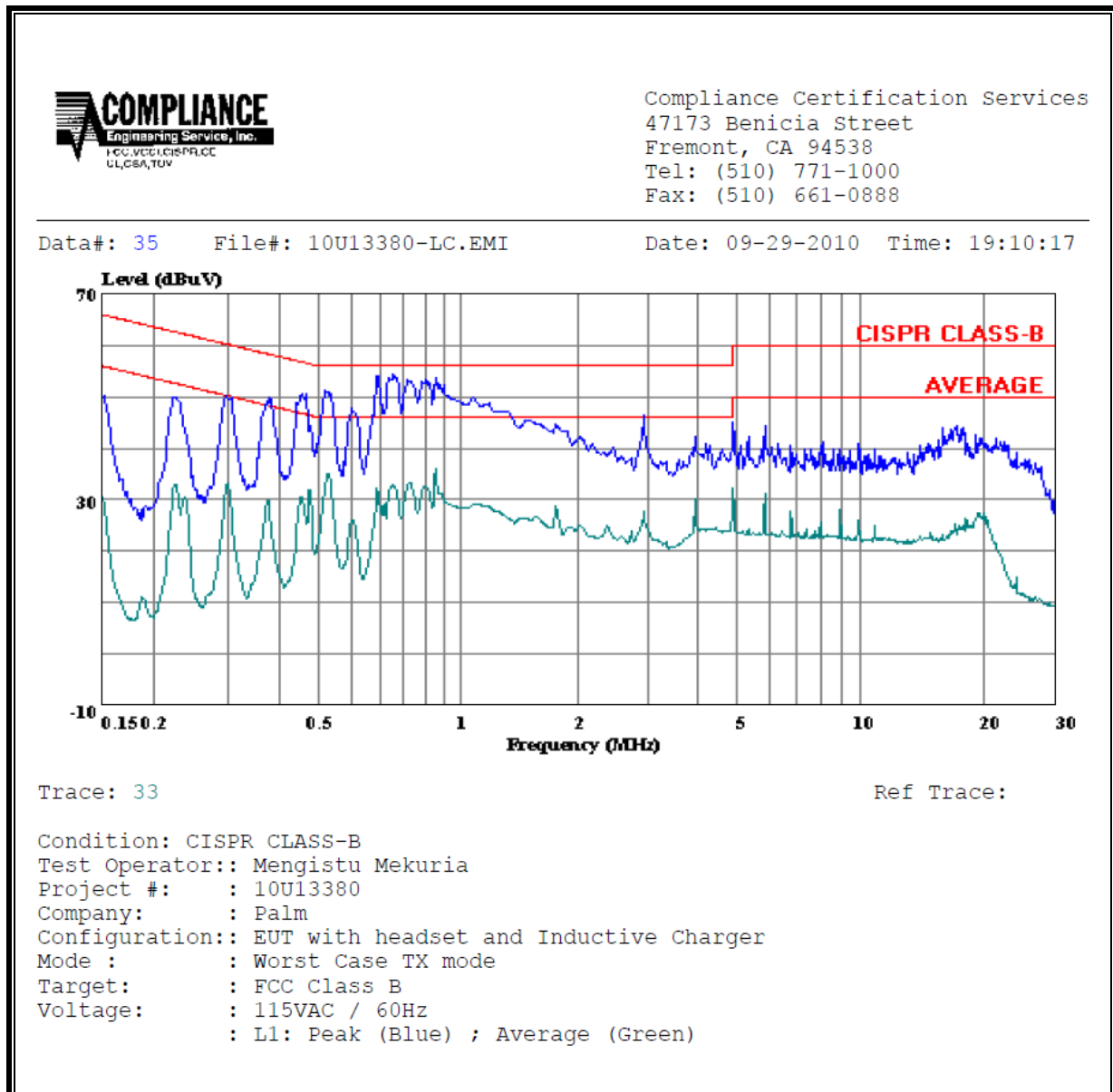
Trace: 47

Ref Trace:

Condition: CISPR CLASS-B
Test Operator:: Mengistu Mekuria
Project #: 10U13380
Company: Palm
Configuration:: EUT with headset and AC Adapter
Mode : Worst Case TX mode
Target: FCC Class B
Voltage: 115VAC / 60Hz
L2: Peak (Blue) ; Average (Green)

EUT WITH AC INDUCTIVE CHARGER

LINE 1 RESULTS



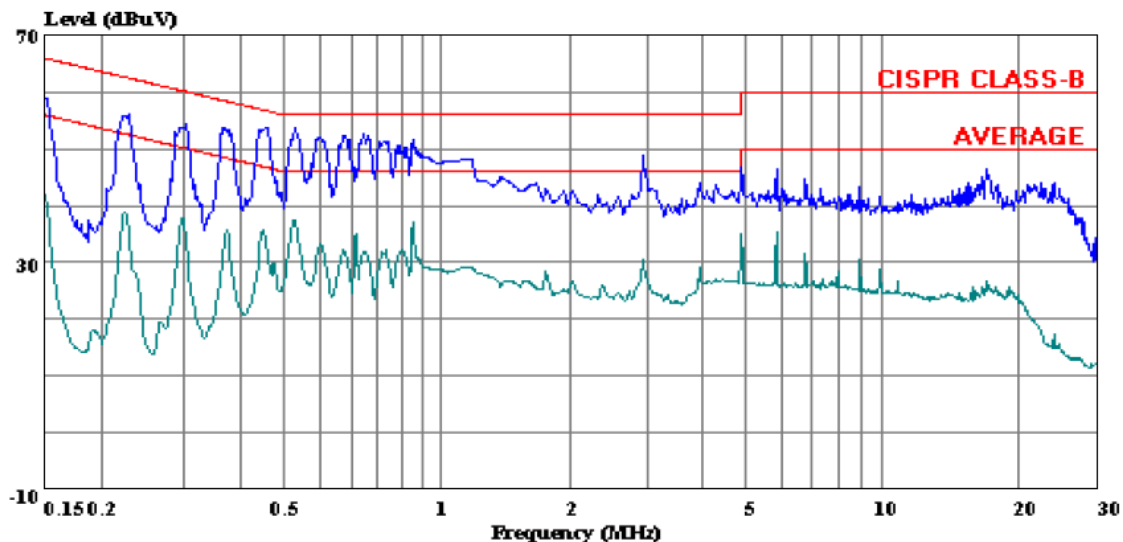
LINE 2 RESULTS



Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 42 File#: 10U13380-LC.EMI

Date: 09-29-2010 Time: 19:16:15



Trace: 40

Ref Trace:

Condition: CISPR CLASS-B
Test Operator:: Mengistu Mekuria
Project #: 10U13380
Company: Palm
Configuration:: EUT with headset and Inductive Charger
Mode : Worst Case TX mode
Target: FCC Class B
Voltage: 115VAC / 60Hz
L2: Peak (Blue) ; Average (Green)