



**FCC CFR47 PART 22H, 24E, AND 27L**

**CERTIFICATION TEST REPORT  
FOR**

**CELL PHONE WITH GSM/CDMA/WCDMA/LTE+BT LE+802.11ABGN (HT20) + NFC  
WITH WIRELESS BACK COVER**

**MODEL NUMBER: LG-VS930  
FCC ID: ZNFVS930**

**REPORT NUMBER: 12U14331-1  
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*Prepared for*

**LG ELECTRONICS INC.  
60-39 GASAN-DONG, GEUMCHEON-GU  
SEOUL, KOREA 153-801, SOUTH KOREA**

*Prepared by*

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
---	05/03/12	Initial Issue	T. Chan



**10. SETUP PHOTOS ..... 189**

# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** LG ELECTRONICS INC.  
60-39 GASAN-DONG, GEUMCHEON-GU  
SEOUL, KOREA 153-801, SOUTH KOREA

**EUT DESCRIPTION:** CELL PHONE WITH GSM/CDMA/WCDMA/LTE+BT  
LE+802.11ABGN (HT20) WITH WIRELESS BACK COVER

**MODEL:** LG-VS930

**SERIAL NUMBER:** 990000760004152

**DATE TESTED:** MARCH 29-APRIL 18, 2012

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 22H, 24E, and 27L	Pass

Compliance Certification Services (UL 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 UL 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 UL CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL 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.

Approved & Released For UL CCS By:

Tested By:



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## 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, FCC CFR Part 24 and FCC Part 27.

## 3. FACILITIES AND ACCREDITATION

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

UL 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:

$$\text{Field Strength (dBuV/m)} = \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \text{Cable Loss (dB)} - \text{Preamp Gain (dB)}$$

$$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$$

### 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 a Cell Phone with GSM/CDMA/WCDMA/LTE+BT LE+802.11abgn (HT20) + NFC with Wireless Back Cover.

### 5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted and ERP / EIRP output powers as follows:

#### Part 22 Cellular Band

Frequency range (MHz)	EUT	Modulation	Conducted		ERP	
			dBm	mW	dBm	mW
824.7 – 848.31	Standard Cover	CDMA2000 1xRTT	28.20	660.7	24.42	276.7
	Inductive Cover				24.85	305.5
	Inductive Charger				21.92	155.6
	Standard Cover	CDMA2000 EVDO REV A	29.32	855.1	23.44	220.8
	Inductive Cover				24.26	266.7
	Inductive Charger				20.00	100.0

#### Part 22 Cellular Band

Frequency range (MHz)	EUT	Modulation	Conducted		ERP	
			dBm	mW	dBm	mW
824.2 – 848.8	Standard Cover	GPRS	32.56	1803.0	30.90	1230.3
	Inductive Cover				30.65	1161.4
	Inductive Charger				29.52	895.4
	Standard Cover	EGPRS	25.84	383.7	26.68	465.6
	Inductive Cover				26.70	467.7
	Inductive Charger				25.53	357.3

#### Part 24 PCS Band

Frequency range (MHz)	EUT	Modulation	Conducted		ERP	
			dBm	mW	dBm	mW
1851.25-1908.75	Standard Cover	CDMA2000 1xRTT	27.65	582.1	29.66	924.7
	Inductive Cover				29.90	977.2
	Inductive Charger				29.65	922.6
	Standard Cover	CDMA2000 EVDO REV A	27.83	606.7	30.93	1238.8
	Inductive Cover				31.72	1485.9
	Inductive Charger				25.26	335.7

Part 24 PCS Band

Frequency range (MHz)	EUT	Modulation	Conducted		ERP	
			dBm	mW	dBm	mW
1850.2-1909.8	Standard Cover	GPRS	29.52	895.4	30.42	1101.5
	Inductive Cover				31.42	1386.8
	Inductive Charger				27.26	532.1
	Standard Cover	EGPRS	25.09	322.8	31.26	1336.6
	Inductive Cover				29.19	829.9
	Inductive Charger				29.58	907.8

Part 24 PCS Band

Frequency range (MHz)	EUT	Modulation	Conducted		ERP	
			dBm	mW	dBm	mW
1852.4-1907.6	Standard Cover	UMTS, REL 99	26.06	403.6	26.52	448.7
	Inductive Cover				29.92	981.7
	Inductive Charger				24.76	299.2
	Standard Cover	UMTS, HSDPA	26.71	468.8	27.31	538.3
	Inductive Cover				29.63	918.3
	Inductive Charger				24.66	292.4

Part 27 LTE Band 13

Frequency range (MHz)	Modulation	Conducted		ERP		
		dBm	mW	dBm	dBm	mW
782	QPSK	28.33	680.8	Standard Cover	29.82	959.4
				Inductive Cover	29.12	816.6
				Inductive Charger	21.58	143.9
782	16QAM	28.54	714.5	Standard Cover	30.10	1023.3
				Inductive Cover	29.49	889.2
				Inductive Charger	22.27	168.7



### 5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an integral antenna for the 850MHz and 1900MHz bands with a maximum peak gain as follow:

BANDS	Peak Gain (dBi)
GSM, CELL, 850MHz	-0.76
GSM,PCS, 1900MHz	-0.18
UMTS, 850MHz	-5.51
UMTS, 1900MHZ	0.33
LTE, Band 13	-1.39

### 5.4. SOFTWARE AND FIRMWARE

The EUT is linked with Agilent 8960, CMU200 and CMW500 Communication Test Set.

### 5.5. WORST-CASE CONFIGURATION AND MODE

The worst-case channel for RF radiated emissions below 1GHz and AC conducted emissions are determined as the channel with the AC Power Adapter Source

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

Worst-case modes below:

- For Cellular and PCS band: 1xRTT (RC1 S055)
- For Cellular and PCS band: CDMA2000 1xEV-DO Revision A. (Rev. A)
- For Cellular and PCS band: GPRS and EGPRS
- For Cellular and PCS band: UMTS, REL 99 and HSDPA.
- LTE Band 13

For the fundamental investigation, since the EUT is a portable device that has three orientations; therefore X, Y and Z orientations and the worst among X, Y, and Z with AC/DC adapter and headset have been investigated. The worst case was found to be at Z-position with AC/DC adapter and headset for both Cell and PCS bands.

## 5.6. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT (RF CONDUCTED TEST)

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	LG	MCS-01WT	TA 1Z0000522	DoC

### I/O CABLES (RF CONDUCTED TEST)

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	2	US115VAC	Un-shielded	2m	NA
2	DC	1	USB	Un-shielded	1m	NA
3	EUT Antenna Port	1	Directional Coupler	Un-shielded	0.1m	NA
4	Spectrum Analyzer	1	Directional Coupler	Un-shielded	none	NA
5	RF In/Out	1	Communication Test Set	Un-shielded	1m	NA

**SUPPORT EQUIPMENT (RF RADIATED TEST)**

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	LG	MCS-01WT	TA1Z0000522	DoC
AC Adapter	LG	WCA-D01WT	TA120012180	DoC
Headset	LG	NA	NA	NA
Inductive Charger	LG	WCP-700	A1201WP000026	NA

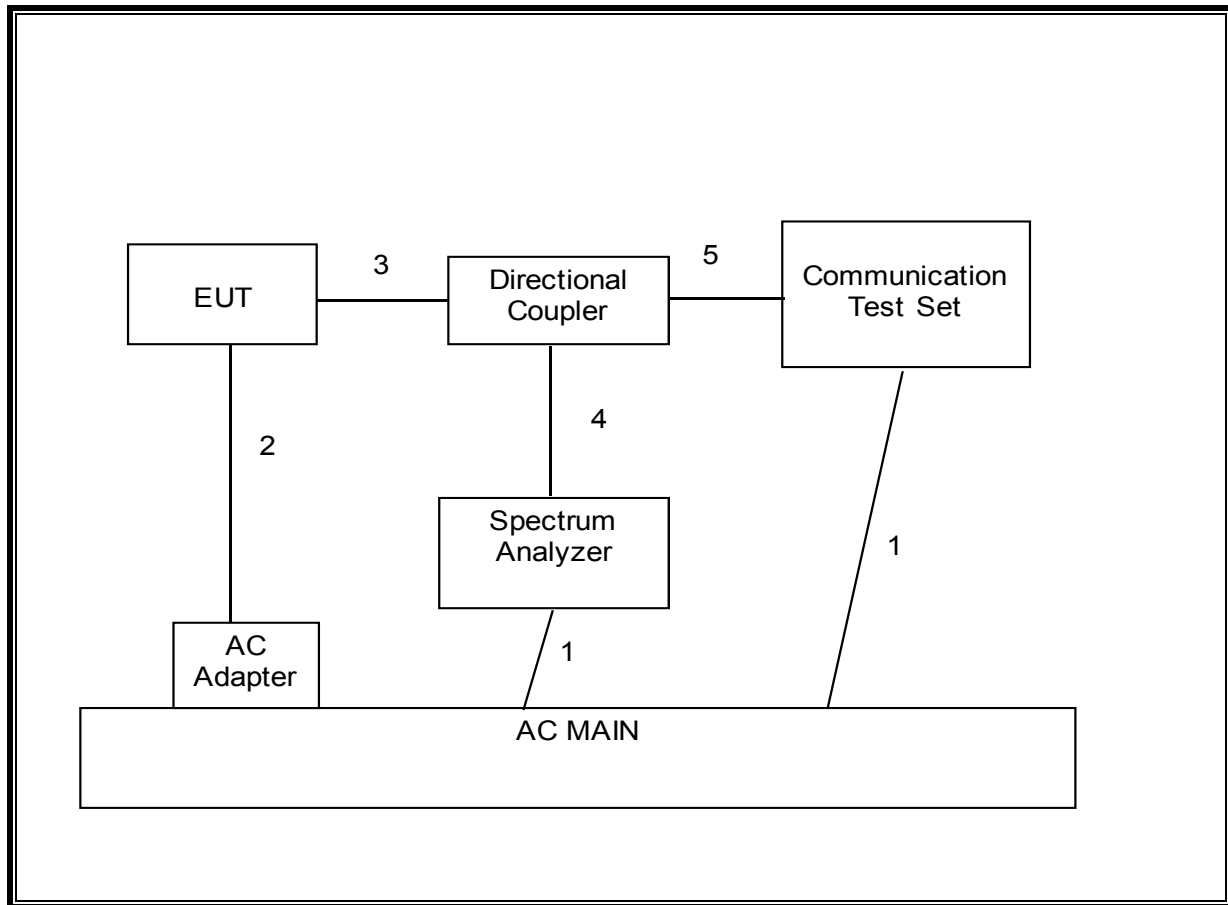
**I/O CABLES (RF RADIATED TEST)**

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	2	USB	Un-shielded	1m	NA
2	DC	1	DC	Un-shielded	1.5m	For Inductive Charger
3	Jack	1	Earphone	Un-shielded	1.5m	NA
4	RF In/Out	1	Horn	Un-shielded	2m	NA

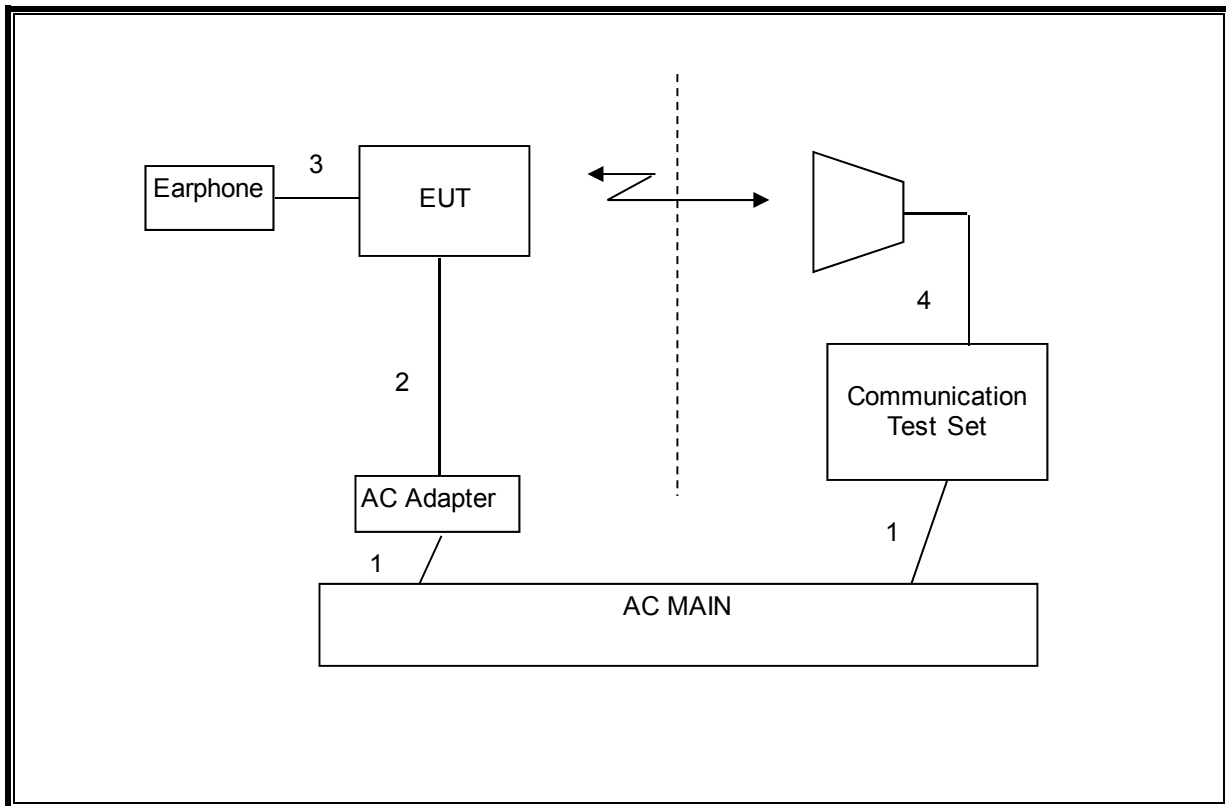
**TEST SETUP**

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

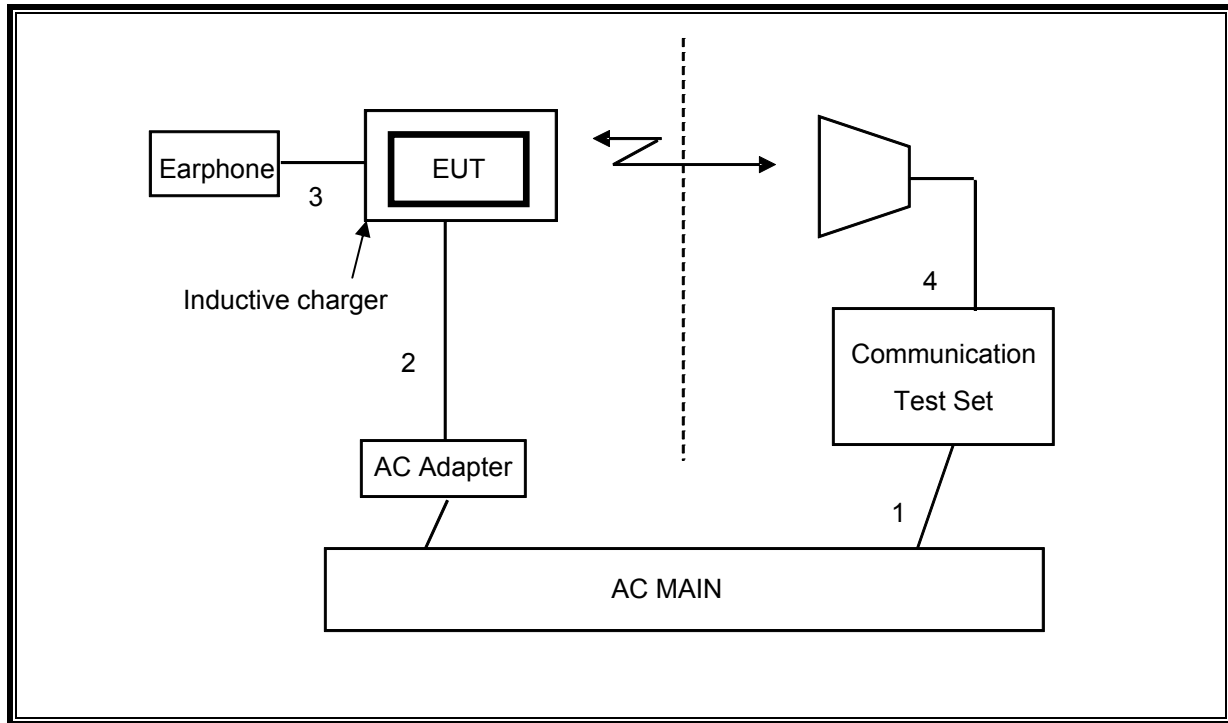
**SETUP DIAGRAM FOR RF CONDUCTED TESTS**



**STANDARD/INDUCTIVE COVER SETUP DIAGRAM FOR RF RADIATED TESTS**



**INDUCTIVE CHARGER SETUP DIAGRAM FOR RF RADIATED TESTS**



## 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	C01052	07/12/12
Antenna, Bilog, 30MHz-1 GHz	Sundt Sciences	JB1	C01011	03/23/13
Antenna, Horn, 18 GHz	EMCO	3115	C00945	10/06/12
Antenna, Horn, 18 GHz	EMCO	3115	C00783	06/29/12
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01176	08/04/12
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C00986	03/22/13
Communications Test Set	Agilent / HP	E5515C	1000732	09/27/12
Communication Test Set	R & S	CMU 200	C01131	06/24/12
Wideband Communication Test Set	R & S	CMW 500	None	12/16/12
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00580	11/11/12
DC Power Supply	Lambda	LA-300	None	07/14/12
Signal Generator, 20 GHz	Agilent / HP	83732B	C00774	04/20/12
Temperature / Humidity Chamber	Thermotron	SE 600-10-10	C00930	07/16/12
Antenna, Tuned Dipole 400~1000 MHz	ETS	3121C DB4	C00993	CNR
Highpass Filter, 2.7 GHz	Micro-Tronics	HPM13194	N02686	CNR
Highpass Filter, 1.5 GHz	Micro-Tronics	HPM13193	N02688	CNR
Directional Coupler	RF-Lambda	RFDC5M06G15	None	CNR

## 7. RF POWER OUTPUT VERIFICATION

### 7.1. RF POWER OUTPUT FOR 1xRTT

#### TEST PROCEDURE

This procedure assumes the Agilent 8960 Test Set has the following applications installed and with valid license.

<u>Application</u>	<u>Rev, License</u>
CDMA2000 Mobile Test	B.13.08, L

- Call Setup > Shift & Preset
- Cell Info > Cell Parameters > System ID (SID) > 18  
> Network ID (NID) > 65535
- Protocol Rev > 6 (IS-2000-0)
- Radio Config (RC) > Please see following table or details
- FCH Service Option (SO) Setup > Please see following table or details
- Traffic Data Rate > Full
- TDSO SCH Info > F-SCH Parameters > F-SCH Data Rate > 153.6 kbps  
> R-SCH Parameters > R-SCH Data Rate > 153.6 kbps
- Rvs Power Ctrl > Active bits
  - Rvs Power Ctrl > All Up bits (Maximum TxPout)

#### RESULT



**CELL BAND:**

Radio Configuration (RC)	Service Option (SO)	Conducted Output Power (dBm)		
		Ch. 1013 / 824.7 MHz	Ch. 384 / 836.52 MHz	Ch. 777 / 848.31 MHz
		Peak	Peak	Peak
RC1	2 (Loopback)	28.08	27.97	27.94
	55 (Loopback)	<b>28.20</b>	28.05	27.81
RC2	9 (Loopback)	28.14	28.04	27.91
	55 (Loopback)	28.07	27.99	28.03
RC3	2 (Loopback)	27.81	27.67	27.62
	55 (Loopback)	27.79	27.67	27.49
	32 (+ F-SCH)	27.81	27.74	27.60
	32 (+ SCH)	27.82	28.06	27.65
RC4	2 (Loopback)	27.83	27.69	27.63
	55 (Loopback)	27.79	27.82	27.48
	32 (+ F-SCH)	27.94	27.99	27.84
	32 (+ SCH)	27.93	27.86	27.89
RC5	9 (Loopback)	27.85	27.73	27.70
	55 (Loopback)	27.79	27.74	27.61

**PCS BAND:**

Radio Configuration (RC)	Service Option (SO)	Conducted Output Power (dBm)		
		Ch. 25 / 1851.25 MHz	Ch. 600 / 1880 MHz	Ch. 1175 / 1908.75 MHz
		Peak	Peak	Peak
RC1	2 (Loopback)	27.30	27.47	27.03
	55 (Loopback)	27.31	<b>27.65</b>	27.06
RC2	9 (Loopback)	27.31	27.57	26.97
	55 (Loopback)	27.26	27.56	27.14
RC3	2 (Loopback)	27.00	27.26	26.80
	55 (Loopback)	27.03	27.32	26.75
	32 (+ F-SCH)	27.16	27.35	26.78
	32 (+ SCH)	27.08	27.44	26.96
RC4	2 (Loopback)	27.08	27.34	26.82
	55 (Loopback)	27.04	27.34	26.83
	32 (+ F-SCH)	27.21	27.57	27.10
	32 (+ SCH)	27.24	27.55	26.98
RC5	9 (Loopback)	27.10	27.30	26.83
	55 (Loopback)	27.06	27.34	26.84

## 7.2. RF POWER OUTPUT FOR CDMA2000 1xEV-DO Release 0 (Rel. 0)

### TEST PROCEDURE

This procedure assumes the Agilent 8960 Test Set has the following applications installed and with valid license.

<u>Application</u>	<u>Rev, License</u>
1xEV-DO Terminal Test	A.09.13

#### EVDO Release 0 - RTAP

- Call Setup > Shift & Preset
- Call Control:
  - Access Network Info > Cell Parameters > Sector ID > 00000000 > Subnet Mask > 0
  - Generator Info > Termination Parameters > Max Forward Packet Duration > 16 Slots
- Call Parm:
  - Cell Power > -105.5 dBm/1.23 MHz
  - Cell Band > (Select US Cellular or US PCS)
  - Channel > (Enter channel number)
  - Application Config > Enhanced Test Application Protocol > RTAP
  - RTAP Rate > 153.6 kbps
  - Rvs Power Ctrl > Active bits
  - Protocol Rel > 0 (1xEV-DO)
- Press "Start Data Connection" when "Session Open" appear in "Active Cell"
- Rvs Power Ctrl > All Up bits (Maximum TxPout)

#### EVDO Release 0 - FTAP

- Call Setup > Shift & Preset
- Call Control:
  - Access Network Info > Cell Parameters > Sector ID > 00000000 > Subnet Mask > 0
  - Generator Info > Termination Parameters > Max Forward Packet Duration > 16 Slots
- Call Parm:
  - Cell Power > -105.5 dBm/1.23 MHz
  - Cell Band > (Select US Cellular or US PCS)
  - Channel > (Enter channel number)
  - Application Config > Enhanced Test Application Protocol > FTAP (default)
  - FTAP Rate > 307.2 kbps (2 Slot, QPSK)
  - Rvs Power Ctrl > Active bits
  - Protocol Rel > 0 (1xEV-DO)
- Press "Start Data Connection" when "Session Open" appear in "Active Cell"
- Rvs Power Ctrl > All Up bits (Maximum TxPout)

### RESULTS

Cell Band

FTAP Rate	RTAP Rate	Channel	f (MHz)	Conducted power (dBm)
				Peak
307.2 kbps (2 slot, QPSK)	153.6 kbps	1013	824.70	29.23
		384	836.52	<b>29.24</b>
		777	848.31	28.97

PCS Band

FTAP Rate	RTAP Rate	Channel	f (MHz)	Conducted power (dBm)
				Peak
307.2 kbps (2 slot, QPSK)	153.6 kbps	25	1851.25	27.50
		600	1880.00	<b>27.89</b>
		1175	1908.75	27.22

### 7.3. RF POWER OUTPUT FOR CDMA2000 1xEV-DO Revision A (Rev. A)

#### TEST PROCEDURE

This procedure assumes the Agilent 8960 Test Set has the following applications installed and with valid license.

<u>Application</u>	<u>Rev, License</u>
1xEV-DO Terminal Test	A.09.13

#### EVDO Release A – RETAP

- Call Setup > Shift & Preset
- Cell Power > -60 dBm/1.23 MHz
- Protocol Rev > A (1xEV-DO-A)
- Application Config > Enhanced Test Application Protocol > RETAP
- R-Data Pkt Size > 4096
- Protocol Subtype Config > Release A Physical Layer Subtype > Subtype 2
- > PL Subtype 2 Access Channel MAC Subtype > Default (Subtype 0)
- Access Network Info > Cell Parameters > Sector ID > 00000000 > Subnet Mask > 0
- Generator Info > Termination Parameters > Max Forward Packet Duration >16 Slots > ACK R-Data After > Subpacket 0 (All ACK)
- Rvs Power Ctrl > All Up bits (to get the maximum power)

#### EVDO Release A - FETAP

- Call Setup > Shift & Preset
- Cell Power > -60 dBm/1.23 MHz
- Protocol Rev > A (1xEV-DO-A)
- Application Config > Enhanced Test Application Protocol > FETAP
- F-Traffic Format > 4 (1024, 2,128) Canonical (307.2k, QPSK)
- Protocol Subtype Config > Release A Physical Layer Subtype > Subtype 2
- > PL Subtype 2 Access Channel MAC Subtype > Default (Subtype 0)
- Access Network Info > Cell Parameters > Sector ID > 00000000 > Subnet Mask > 0
- Generator Info > Termination Parameters > Max Forward Packet Duration >16 Slots > ACK R-Data After > Subpacket 0 (All ACK)
- Rvs Power Ctrl > All Up bits (to get the maximum power)

#### RESULTS

Cell Band

FETAP-Traffic Format	RETAP-Data Payload Size	Channel	f (MHz)	Conducted power (dBm)
				Peak
307.2k, QPSK/ ACK channel is transmitted at all the slots	4096	1013	824.70	<b>29.32</b>
		384	836.52	29.21
		777	848.31	28.97

PCS Band

FETAP-Traffic Format	RETAP-Data Payload Size	Channel	f (MHz)	Conducted power (dBm)
				Peak
307.2k, QPSK/ ACK channel is transmitted at all the slots	4096	25	1851.25	27.62
		600	1880.00	<b>27.83</b>
		1175	1908.75	27.36

## 7.4. RF POWER OUTPUT FOR GSM MODE

### TEST PROCEDURE

#### GPRS/EGPRS

Function: Menu select > GSM Mobile Station > GSM 850/900/1800/1900  
Press Connection control to choose the different menus  
Press RESET > choose all to reset all settings  
Connection Press Signal Off to turn off the signal and change settings  
Network Support > GSM+GPRS or GSM+EGPRS  
Main Service > Packet Data  
Service selection > Test Mode A – Auto Slot Config. off  
MS Signal Press Slot Config bottom on the right twice to select and change the number of time slots and power setting  
    > Slot configuration > Uplink/Gamma  
    > 33 dBm for GPRS 850/900  
    > 27 dBm for EGPRS 850/900  
    > 30 dBm for GPRS1800/1900  
    > 26 dBm for EGPRS1800/1900  
BS Signal Enter the same channel number for TCH channel (test channel) and BCCH channel  
Frequency Offset > + 0 Hz  
Mode > BCCH and TCH  
BCCH Level > -85 dBm (May need to adjust if link is not stable)  
BCCH Channel > choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel]  
Channel Type > Off  
P0> 4 dB  
Slot Config > Unchanged (if already set under MS Signal)  
TCH > choose desired test channel  
Hopping > Off  
Main Timeslot > 3 (Default)  
Network Coding Scheme > CS4 (GPRS) and MCS9 (EGPRS)  
Bit Stream > 2E9-1PSR Bit Pattern  
AF/RF Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input  
Connection Press Signal On to turn on the signal and change settings

### RESULTS

**GPRS for Cell and PCS Band**

Mode	Ch.	f (MHz)	1 time slot	2 time slots
			Peak	Peak
GPRS	128	824.2	32.46	31.86
	190	836.6	<b>32.56</b>	32.14
	251	848.8	32.33	31.92
GPRS	512	1850.2	29.50	29.35
	661	1880	29.51	29.36
	810	1909.8	<b>29.52</b>	29.38

**EGPRS for Cell and PCS Band**

Mode	Ch.	f (MHz)	1 time slot	2 time slots
			Peak	Peak
EGPRS	128	824.2	<b>25.84</b>	25.57
	190	836.6	25.80	25.54
	251	848.8	25.81	25.55
EGPRS	512	1850.2	<b>25.09</b>	24.90
	661	1880	25.05	24.84
	810	1909.8	24.97	24.72



## 7.5. RF POWER OUTPUT FOR UMTS REL99

### TEST PROCEDURE

The following summary of these settings are illustrated below:

	Mode	Rel99
	Subtest	-
WCDMA General Settings	Loopback Mode	Test Mode 1
	Rel99 RMC	12.2kbps RMC
	HSDPA FRC	Not Applicable
	HSUPA Test	Not Applicable
	Power Control Algorithm	Algorithm2
	$\beta_c$	Not Applicable
	$\beta_d$	Not Applicable
	$\beta_{ec}$	Not Applicable
	$\beta_c/\beta_d$	8/15
	$\beta_{hs}$	Not Applicable
$\beta_{ed}$	Not Applicable	

### RESULTS

Band	UL Ch	DL Ch	Frequency	Conducted output power (dBm)
				Peak
UMTS 1900	9262	9662	1852.4	<b>26.06</b>
	9400	9800	1880.0	26.04
	9538	9938	1907.6	26.02

## 7.6. RF POWER OUTPUT FOR UMTS Rel 6 HSDPA

### TEST PROCEDURE

The following summary of these settings are illustrated below:

	Mode	Rel6 HSDPA	Rel6 HSDPA	Rel6 HSDPA	Rel6 HSDPA
	Subtest	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set1			
	HSUPA Test	Not Applicable			
	Power Control Algorithm	Algorithm 2			
	$\beta_c$	2/15	12/15	15/15	15/15
	$\beta_d$	15/15	15/15	8/15	4/15
	$\beta_{ec}$	-	-	-	-
	$\beta_c/\beta_d$	2/15	12/15	15/8	15/4
	$\beta_{hs}$	4/15	24/15	30/15	30/15
HSDPA Specific Settings	$\beta_{ed}$	Not Applicable			
	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback (Table 5.2B.4)	4ms			
	CQI Repetition Factor (Table 5.2B.4)	2			
	Ahs = $\beta_{hs}/\beta_c$	30/15			

### RESULT

Band	Subtest	UL Ch	DL Ch	Frequency	Conducted output power (dBm)
					Peak
UMTS1900 (Band II)	1	9262	9662	1852.4	25.67
		9400	9800	1880.0	25.83
		9538	9938	1907.6	25.62
	2	9262	9662	1852.4	26.43
		9400	9800	1880.0	<b>26.71</b>
		9538	9938	1907.6	26.65
	3	9262	9662	1852.4	26.04
		9400	9800	1880.0	26.17
		9538	9938	1907.6	26.02
	4	9262	9662	1852.4	26.13
		9400	9800	1880.0	26.21
		9538	9938	1907.6	26.09

## 7.7. RF POWER OUTPUT UMTS Rel 6 HSPA (HSDPA & HSUPA)

### TEST PROCEDURE

The following summary of these settings are illustrated below:

	Mode	Rel6 HSUPA	Rel6 HSUPA	Rel6 HSUPA	Rel6 HSUPA	Rel6 HSUPA
	Subtest	1	2	3	4	5
WCDMA General Settings	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2kbps RMC				
	HSDPA FRC	H-Set1				
	HSUPA Test	HSUPA Loopback				
	Power Control Algorithm	Algorithm2				
	$\beta_c$	11/15	6/15	15/15	2/15	15/15
	$\beta_d$	15/15	15/15	9/15	15/15	0
	$\beta_{ec}$	209/225	12/15	30/15	2/15	5/15
	$\beta_c/\beta_d$	11/15	6/15	15/9	2/15	-
	$\beta_{hs}$	22/15	12/15	30/15	4/15	5/15
HSDPA Specific Settings	$\beta_{ed}$	1309/225	94/75	47/15	56/75	47/15
	DACK	8				
	DNAK	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					
HSUPA Specific Settings	D E-DPCCH	6	8	8	5	7
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	12
	ETFCI (from 34.121 Table C.11.1.3)	75	67	92	71	67
	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E_TFCIs	E-TFCI 11 E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO 23 E-TFCI 75 E-TFCI PO 26 E-TFCI 81 E-TFCI PO 27		E-TFCI 11 E-TFCI PO 4 E-TFCI 92 E-TFCI PO 18		E-TFCI 11 E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO 23 E-TFCI 75 E-TFCI PO 26 E-TFCI 81 E-TFCI PO 27

### RESULTS

Band	Subtest	UL Ch	DL Ch	Frequency	Conducted output power (dBm)
					Peak
UMTS1900 (Band II)	1	9262	9662	1852.4	26.08
		9400	9800	1880.0	26.13
		9538	9938	1907.6	26.21
	2	9262	9662	1852.4	26.34
		9400	9800	1880.0	26.30
		9538	9938	1907.6	26.05
	3	9262	9662	1852.4	26.38
		9400	9800	1880.0	26.34
		9538	9938	1907.6	26.28
	4	9262	9662	1852.4	26.34
		9400	9800	1880.0	26.39
		9538	9938	1907.6	26.32
	5	9262	9662	1852.4	26.49
		9400	9800	1880.0	<b>26.69</b>
		9538	9938	1907.6	26.60

LTE 10 MHz BAND 13				
RB CONFIGURATION	START RB OFFSET	MODE	PEAK POWER (dBm)	AVERAGE POWER (dBm)
1	0	QPSK	28.22	22.95
1	49		28.22	22.62
25	12		28.21	21.97
50	0		28.33	21.84
1	0	16QAM	27.80	21.52
1	49		27.74	21.21
25	12		28.54	20.97
50	0		28.22	20.84

## 8. CONDUCTED TEST RESULTS

### 8.1. OCCUPIED BANDWIDTH

#### RULE PART(S)

FCC: §2.1049

IC: RSS-132, 4.5; RSS-133, 6.5

#### LIMITS

For reporting purposes only

#### TEST PROCEDURE

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The -26dB bandwidth was also measured and recorded.

#### MODES TESTED

- 1xRTT – RC1, S055
- CDMA2000 1xEV-DO Revision A (Rev. A)
- GPRS and EGPRS
- UMTS, REL 99 and HSDPA
- LTE BAND 13

#### RESULTS

Band	Mode	Channel	f (MHz)	99% BW (MHz)	-26dB BW (MHz)
Cellular	1xRTT	1013	824.70	1.2758	1.415
		384	836.52	1.2731	1.431
		777	848.31	1.2959	1.406
	CDMA2000 1xEV-DO Revision A (Rev. A)	1013	824.70	1.2587	1.394
		384	836.52	1.2570	1.396
		777	848.31	1.2768	1.384

Band	Mode	Channel	f (MHz)	99% BW (KHz)	-26dB BW (KHz)
Cellular	GPRS	128	824.20	252.5023	305.013
		190	836.60	252.8357	273.010
		251	848.80	252.1423	274.912
	EGPRS	128	824.20	240.9775	286.310
		190	836.60	241.7238	300.699
		251	848.80	242.3674	313.612

Band	Mode	Channel	f (MHz)	99% BW (MHz)	-26dB BW (MHz)
PCS	1xRTT	25	1851.25	1.2848	1.469
		600	1880.0	1.2948	1.404
		1175	1908.75	1.2975	1.417
	CDMA2000 1xEV-DO Revision A (Rev. A)	25	1851.25	1.3018	1.544
		600	1880.0	1.2766	1.404
		1175	1908.75	1.2870	1.442

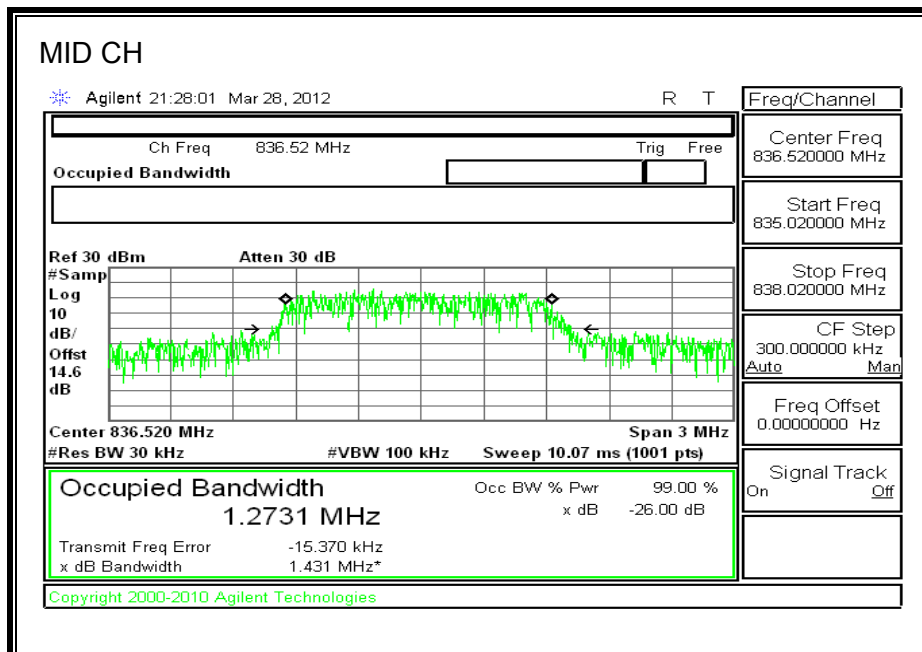
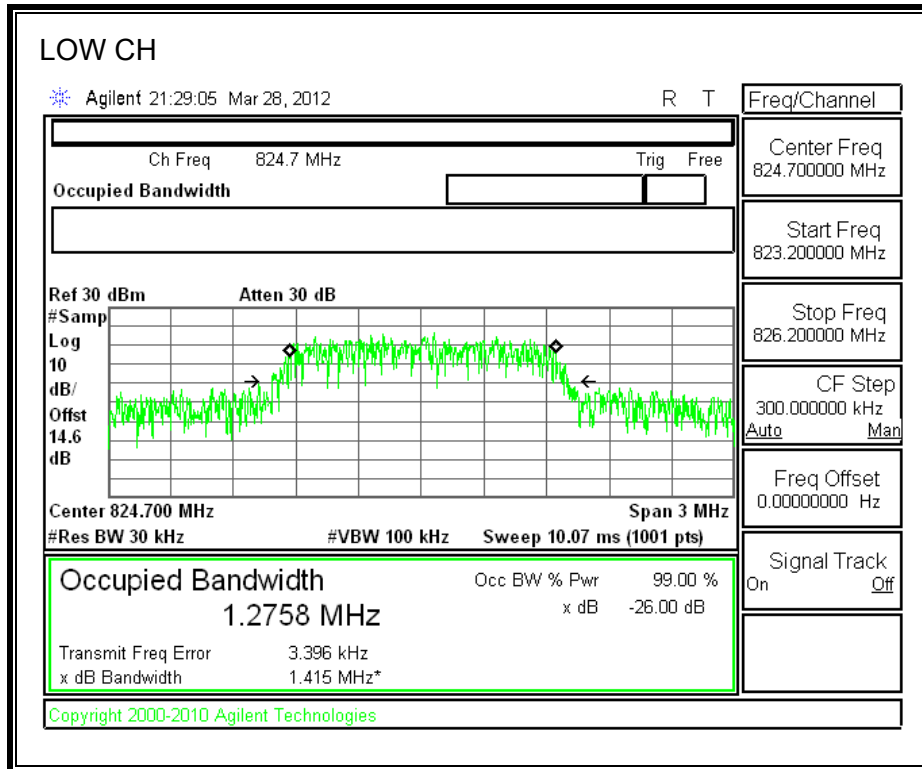
Band	Mode	Channel	f (MHz)	99% BW (KHz)	-26dB BW (KHz)
PCS	GPRS	512	1850.2	252.8859	283.771
		661	1880.0	246.4025	259.481
		810	1909.8	248.7150	287.400
	EGPRS	512	1850.2	251.6579	309.920
		661	1880.0	246.9182	297.065
		810	1909.8	253.8933	289.691

Band	Mode	Channel	f (MHz)	99% BW (MHz)	-26dB BW (MHz)
PCS	UMTS, REL 99	9662	1852.4	4.2040	4.550
		9800	1880.0	4.1943	4.621
		9938	1907.6	4.2073	4.636
	UMTS, HSDPA	9662	1852.4	4.1939	4.568
		9800	1880.0	4.2074	4.561
		9938	1907.6	4.2260	4.593

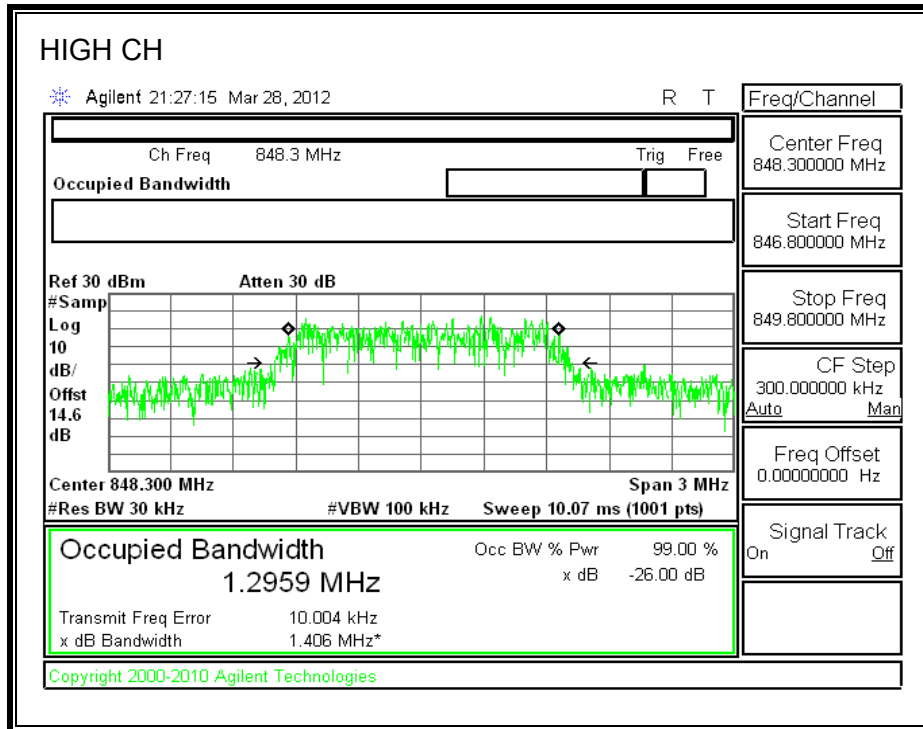
Band	Mode	RB/RB SIZE	f (MHz)	99% BW (kHz)	-26dB BW (kHz)
LTE	10 MHz BAND QPSK	1/0	782.0	268.2399	4618.00
		1/49		274.9714	4557.00
		25/12		4515.20	5573.00
		50/0		8840.70	9426.00
	10 MHz BAND 16QAM	1/0		277.3351	4604.00
		1/49		273.7828	4581.00
		25/12		4516.90	5008.00
		50/0		8860.70	9269.00

**99% BANDWIDTH and 26dB**

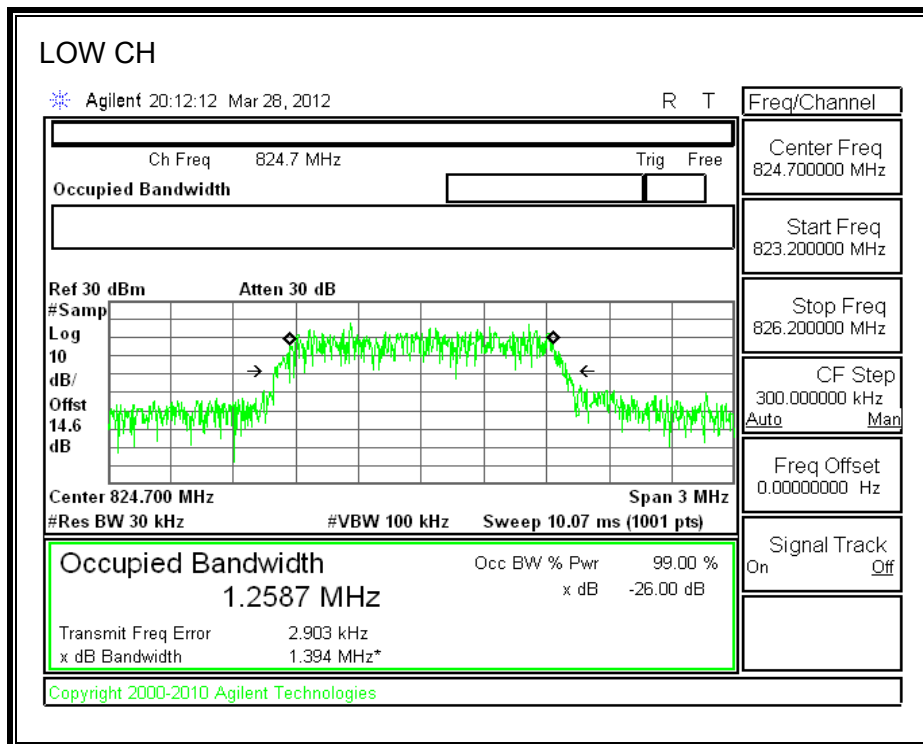
**CDMA2000 1xRTT Mode (Cellular Band)**

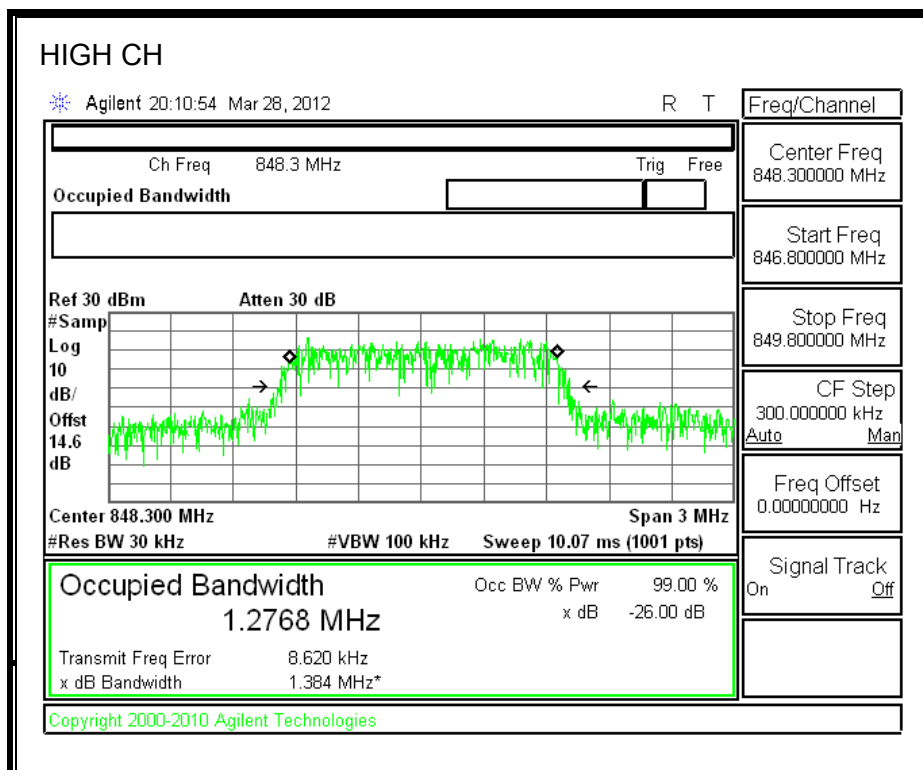
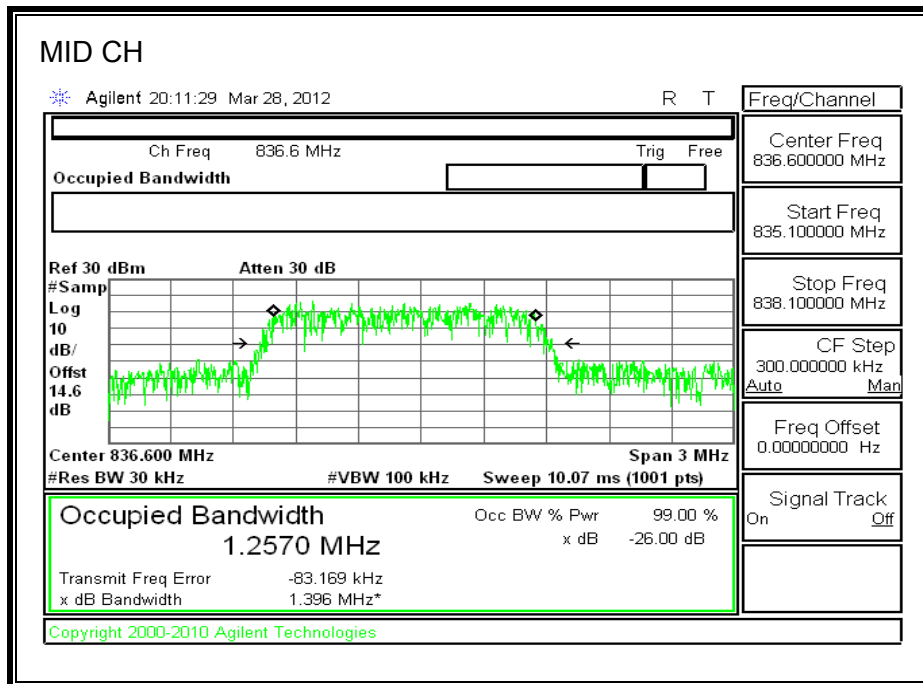




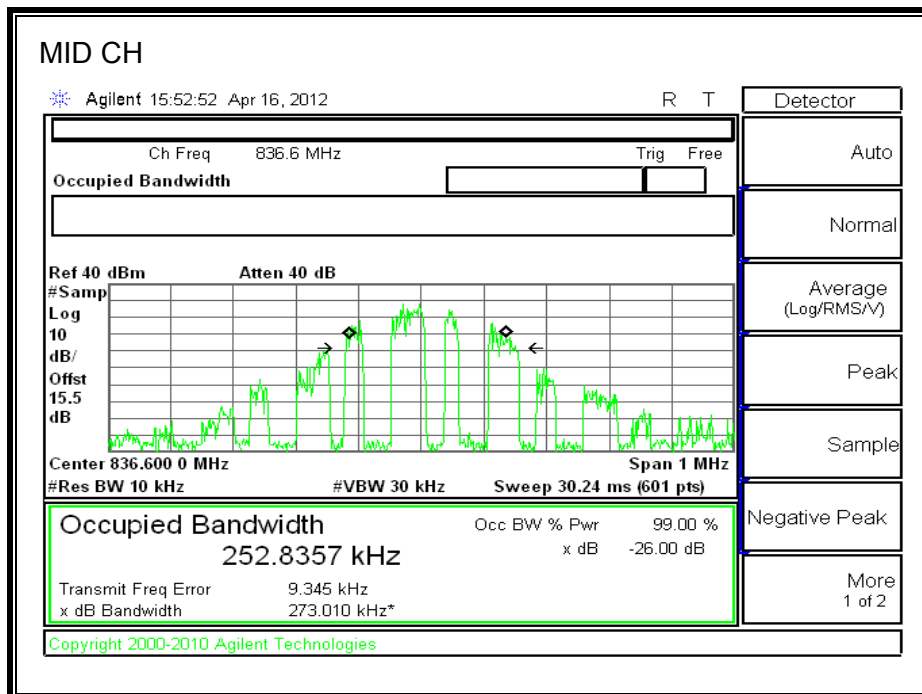
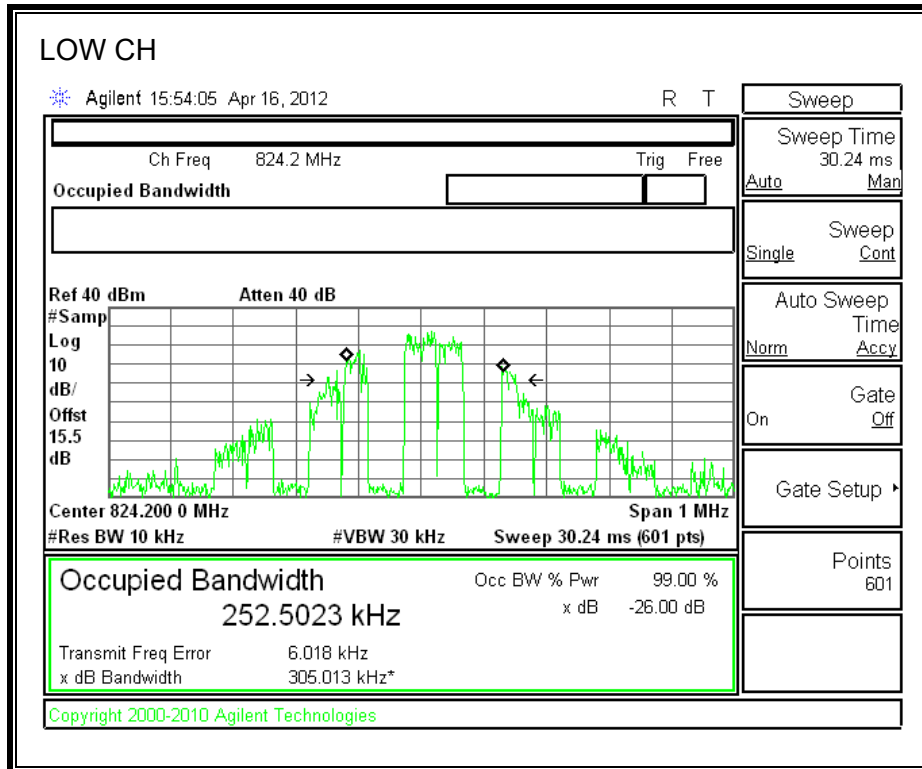


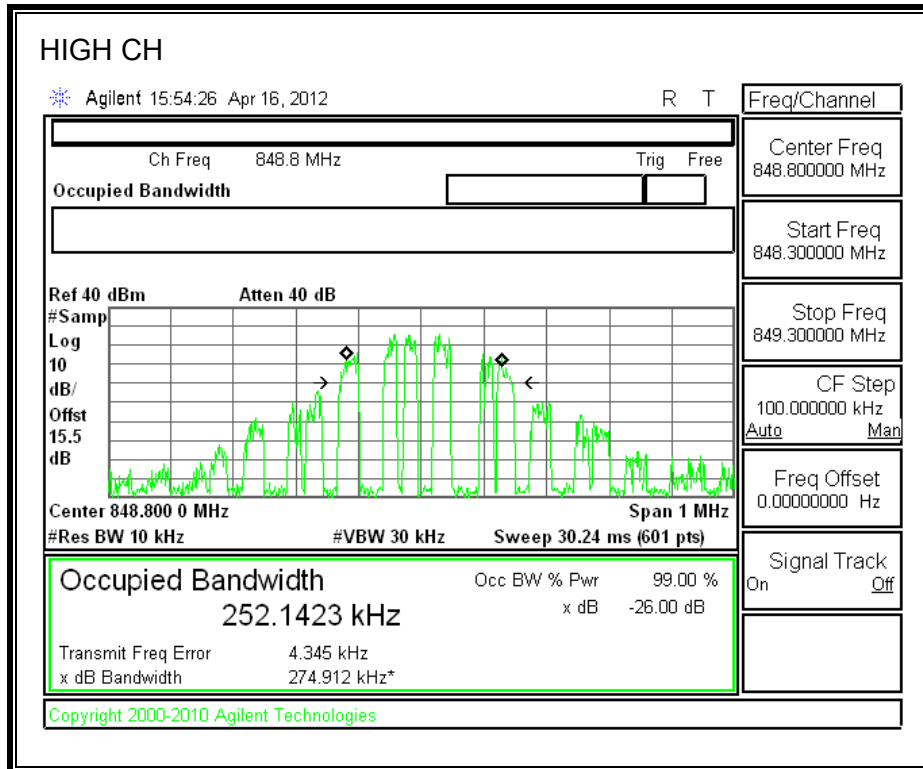
**CDMA2000 1xEV-DO Rev. A, Cellular Band**



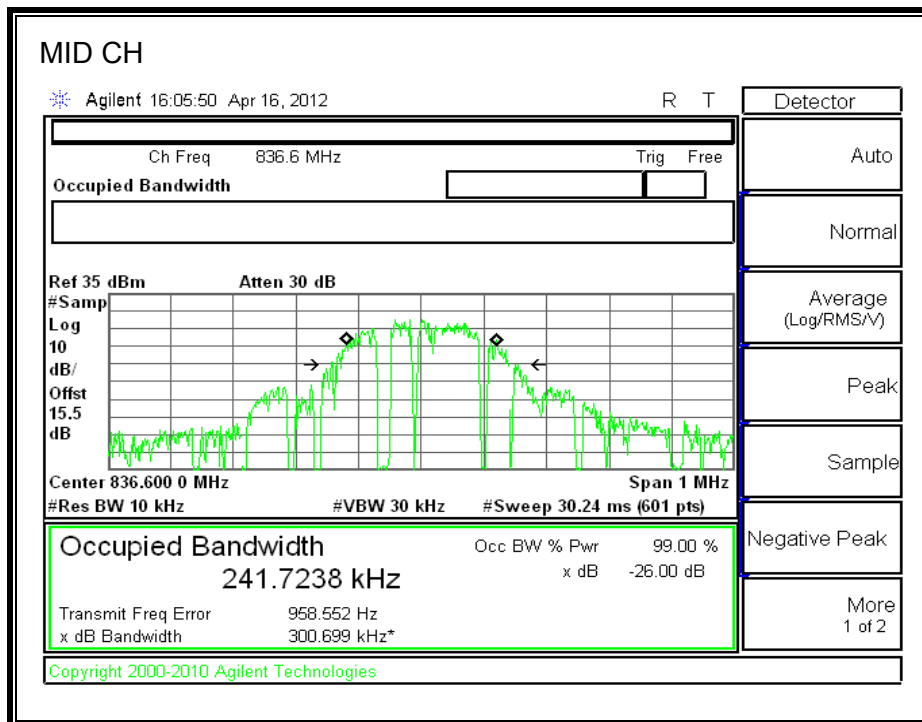
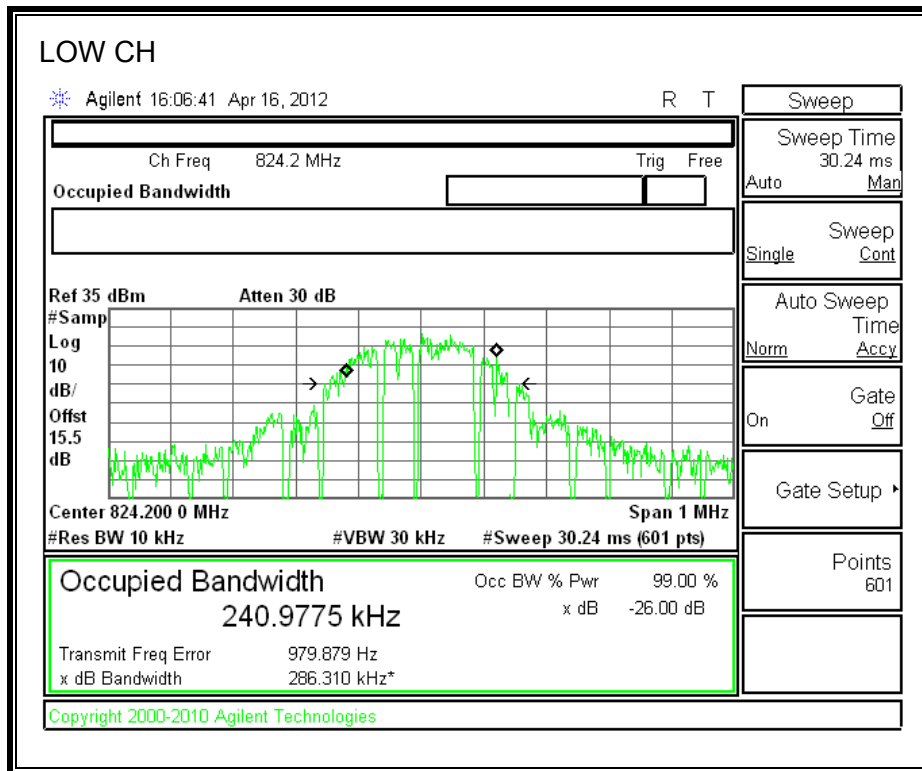


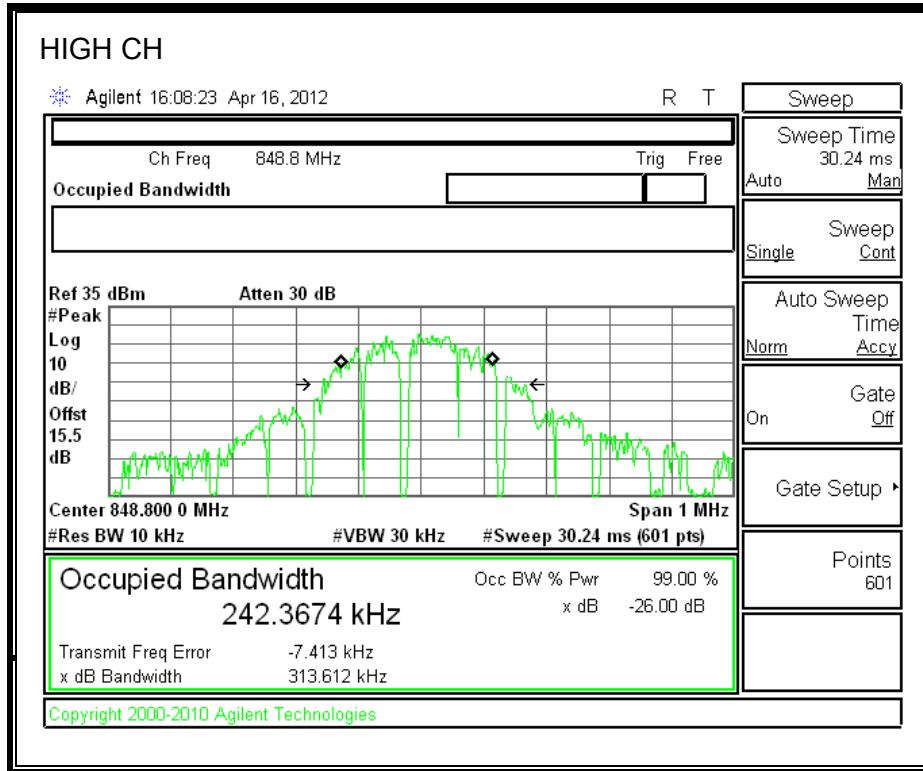
**GPRS Mode (Cellular Band)**



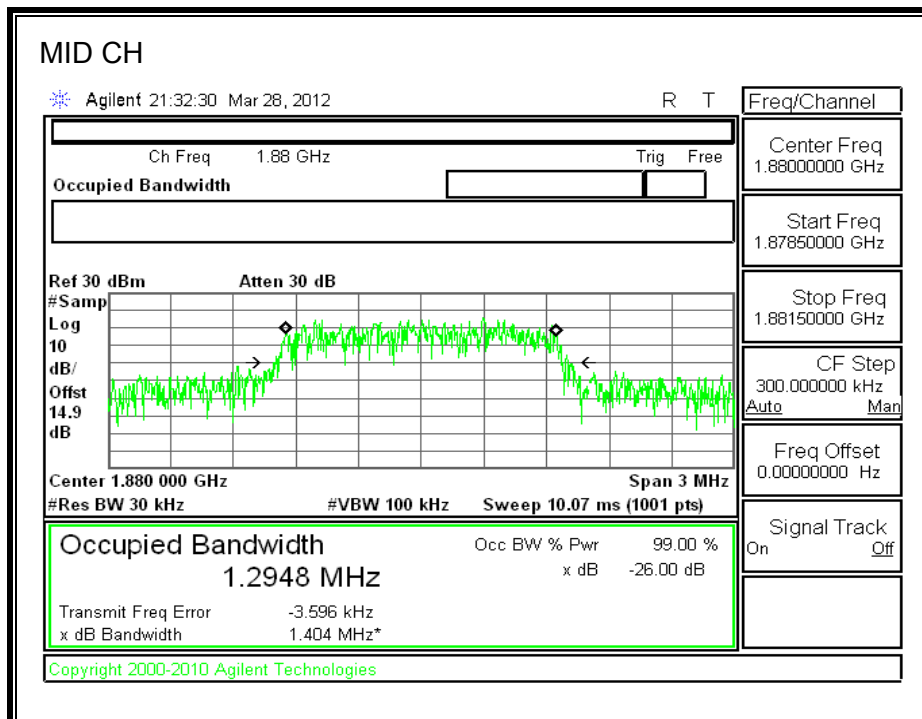
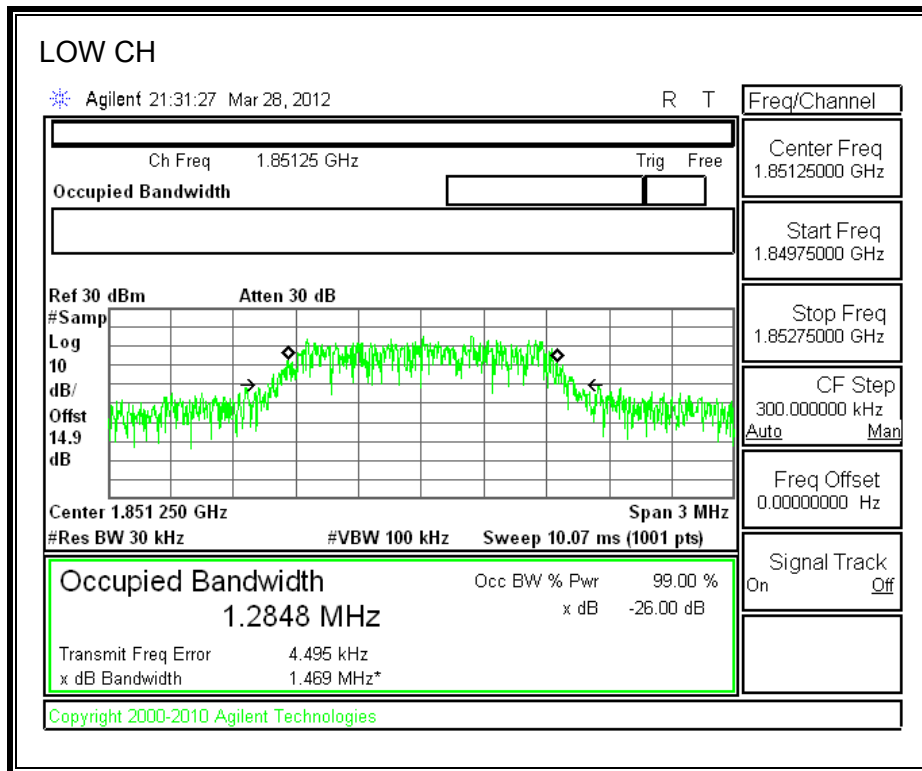


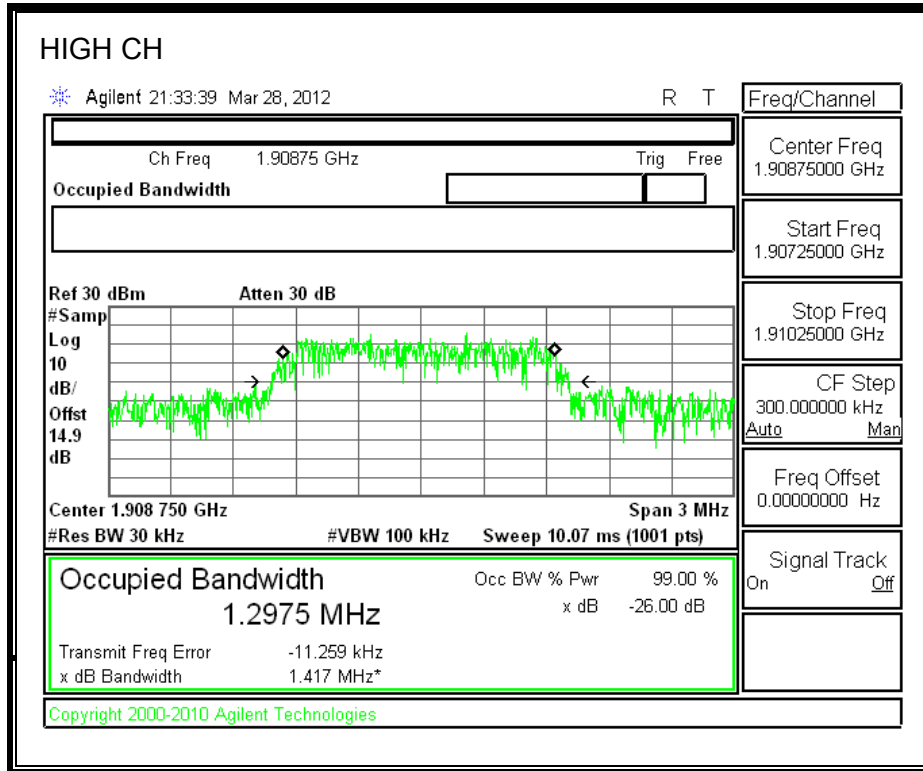
**EGPRS Cellular Band**





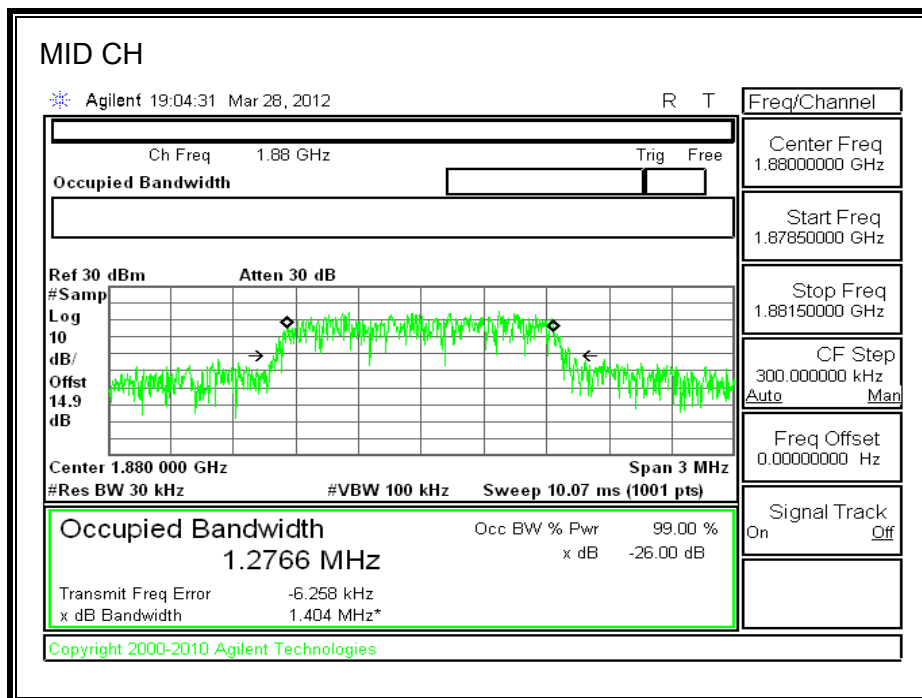
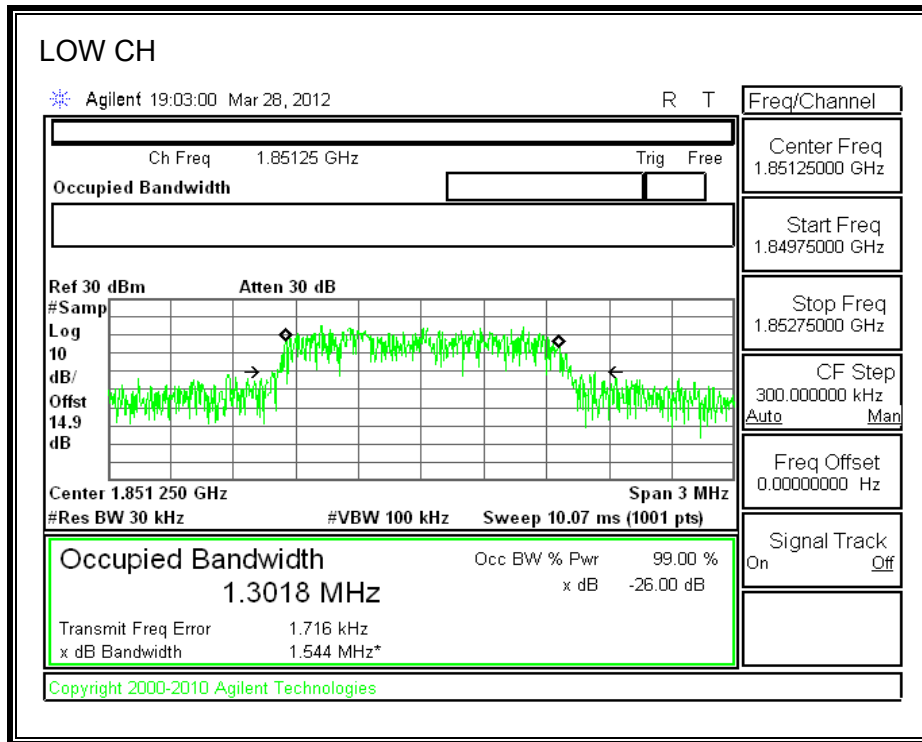
**CDMA2000 1xRTT Mode (PCS Band)**

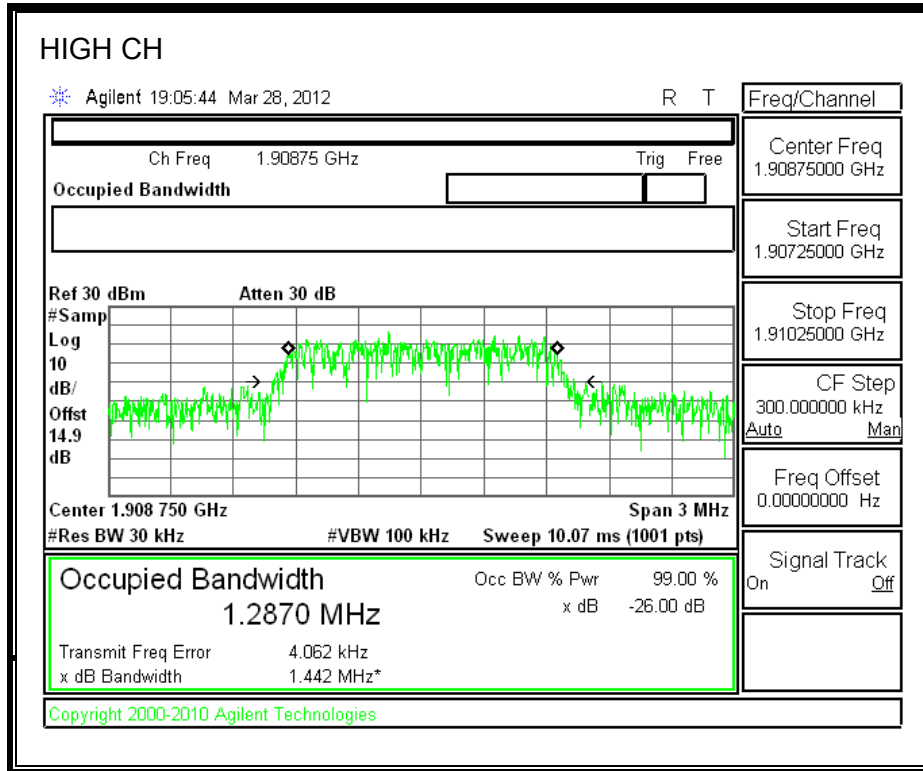




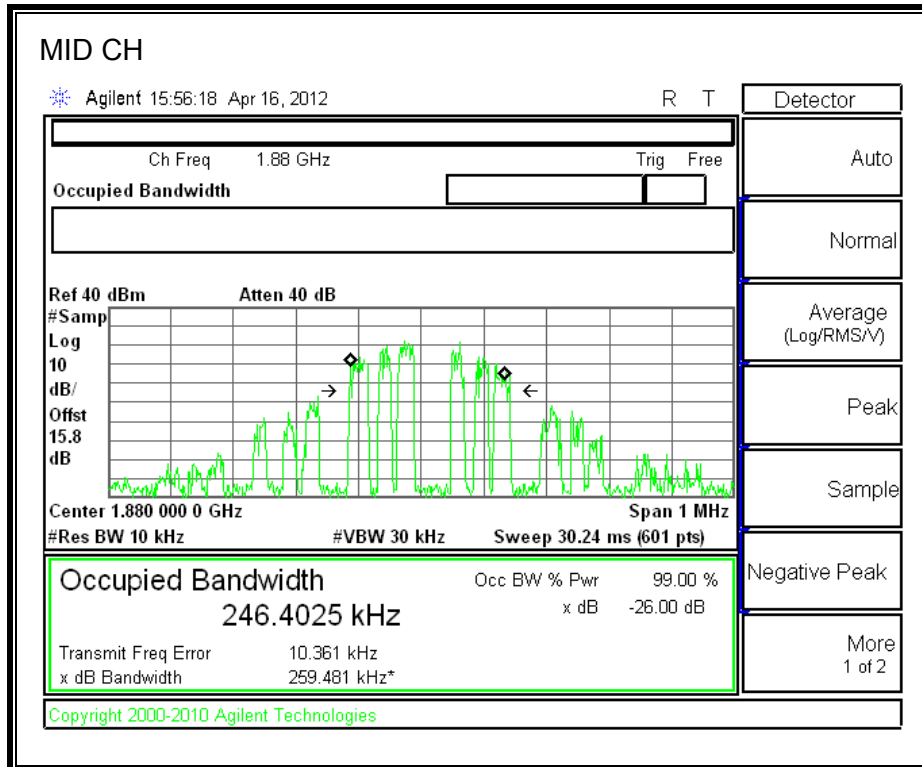
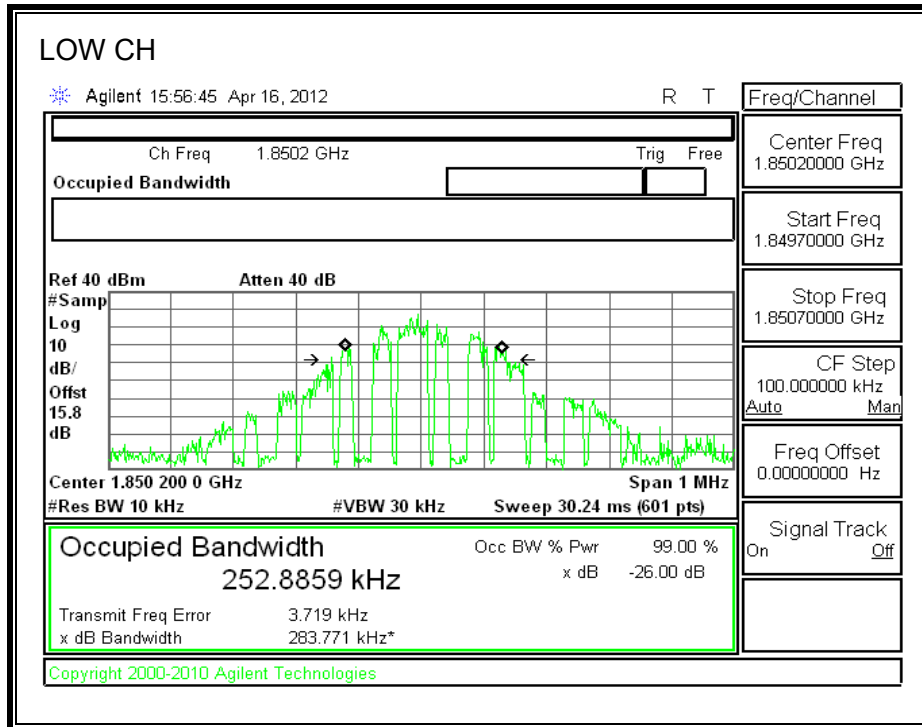


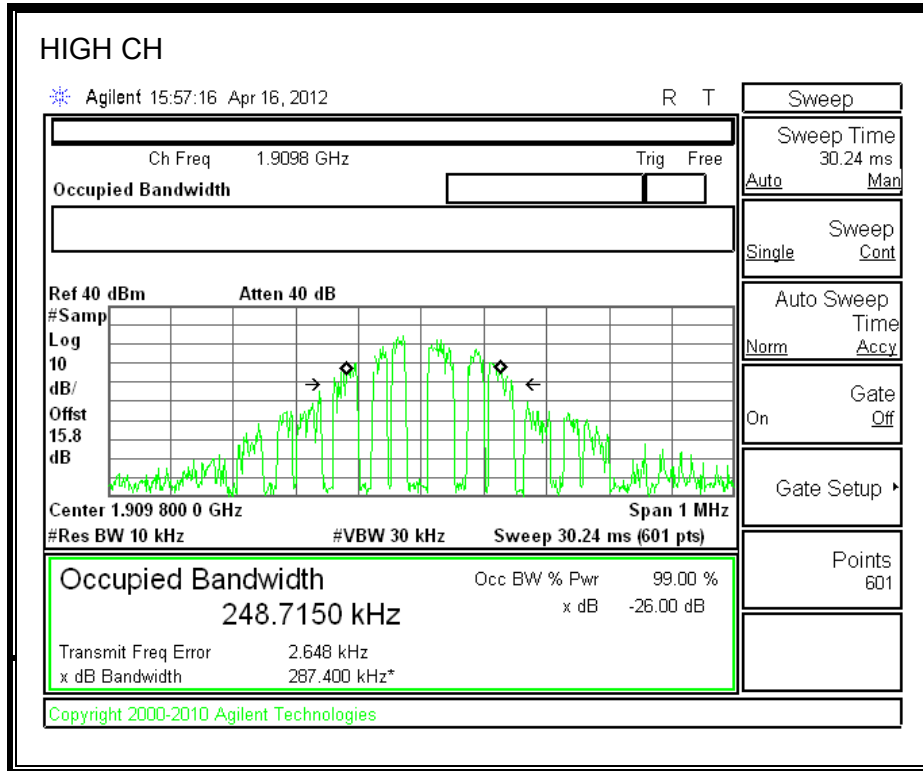
**CDMA2000 1xEV-DO Rev. A Mode (PCS Band)**



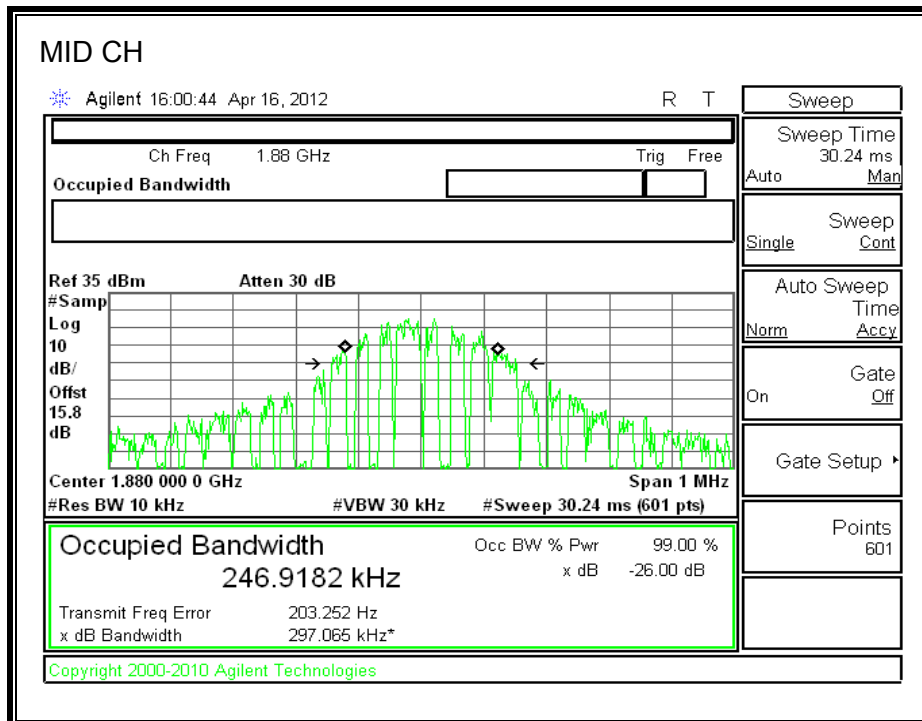
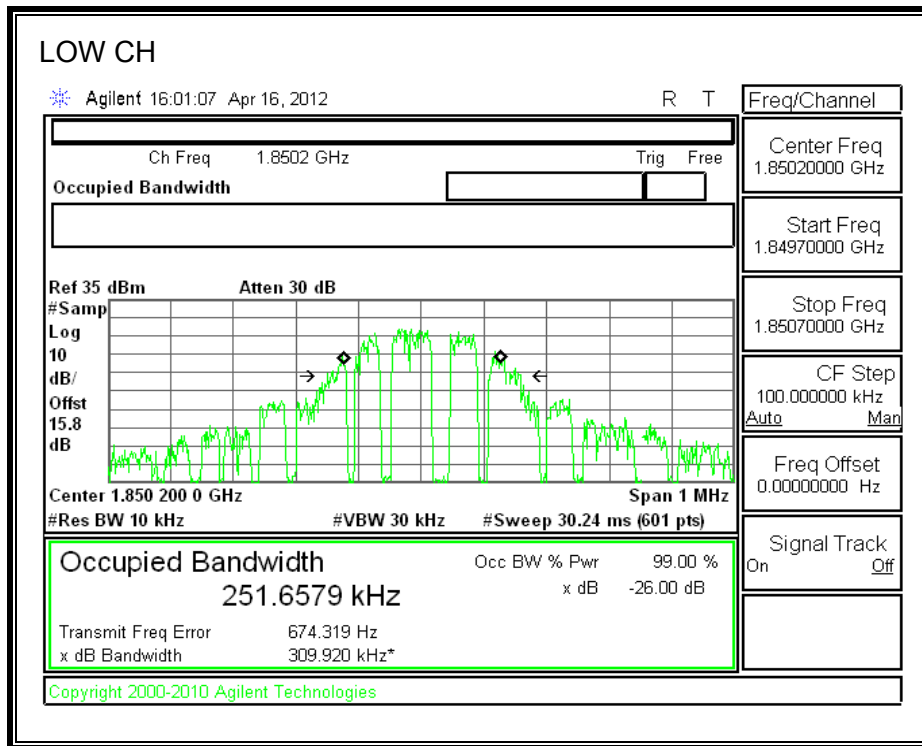


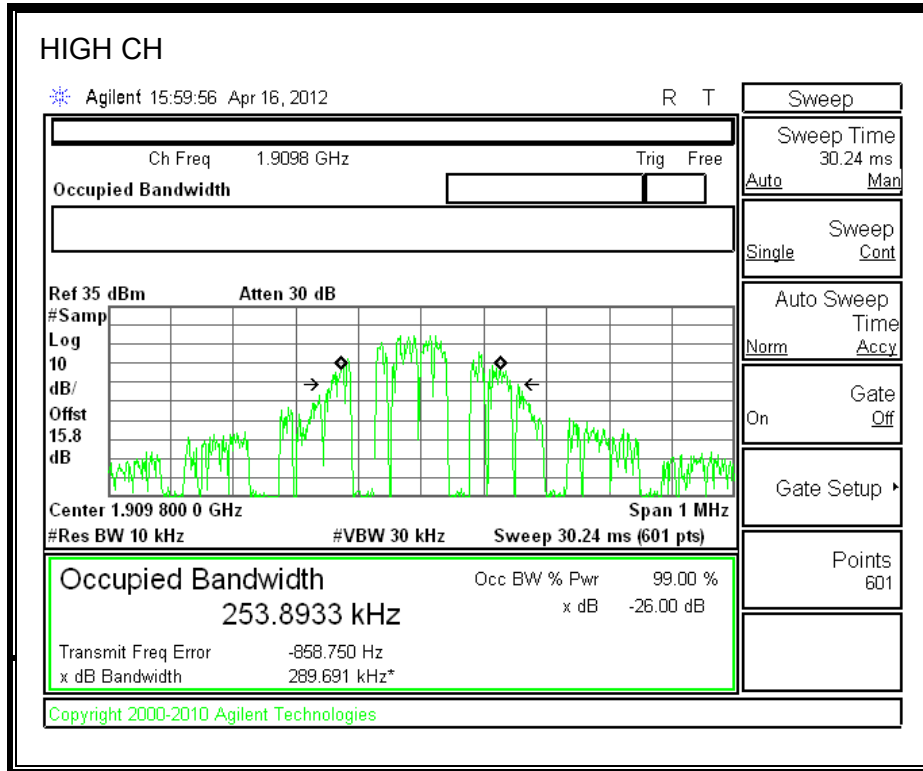
**GPRS 1900 Mode (PCS Band)**



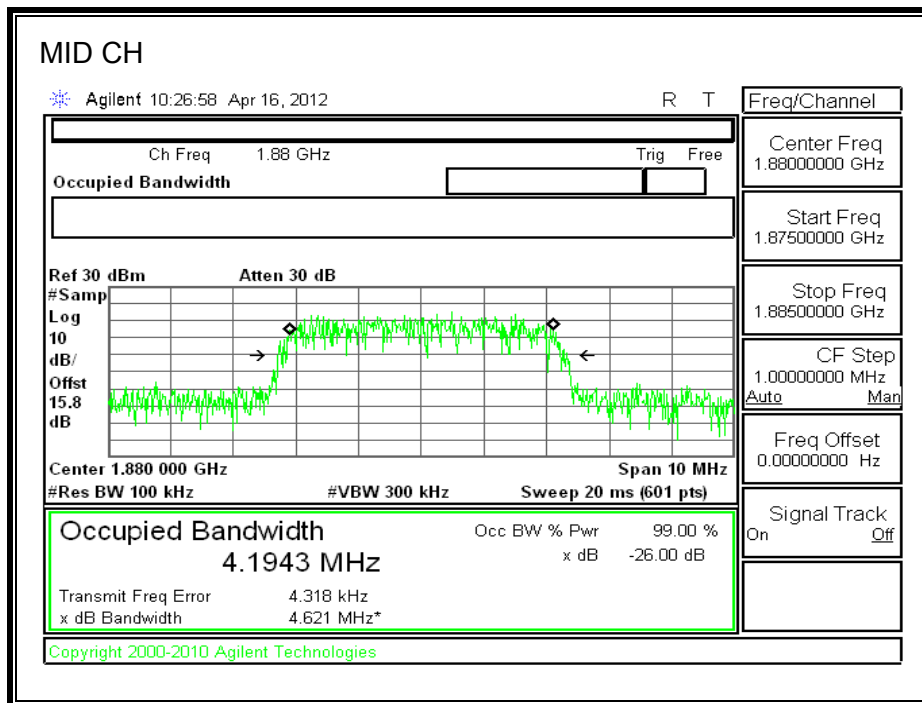
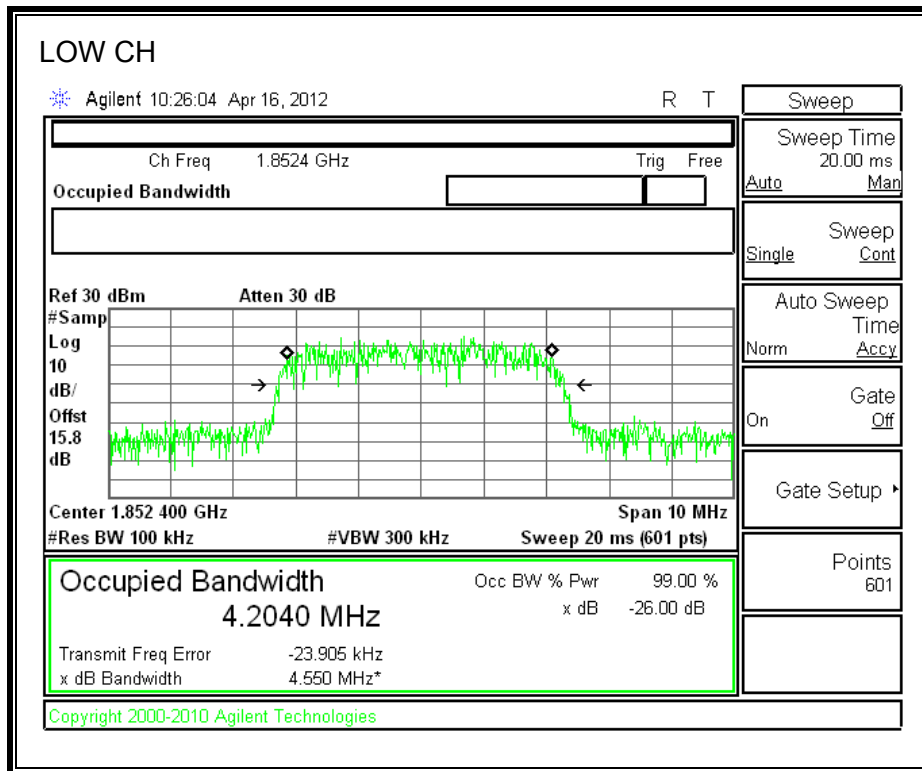


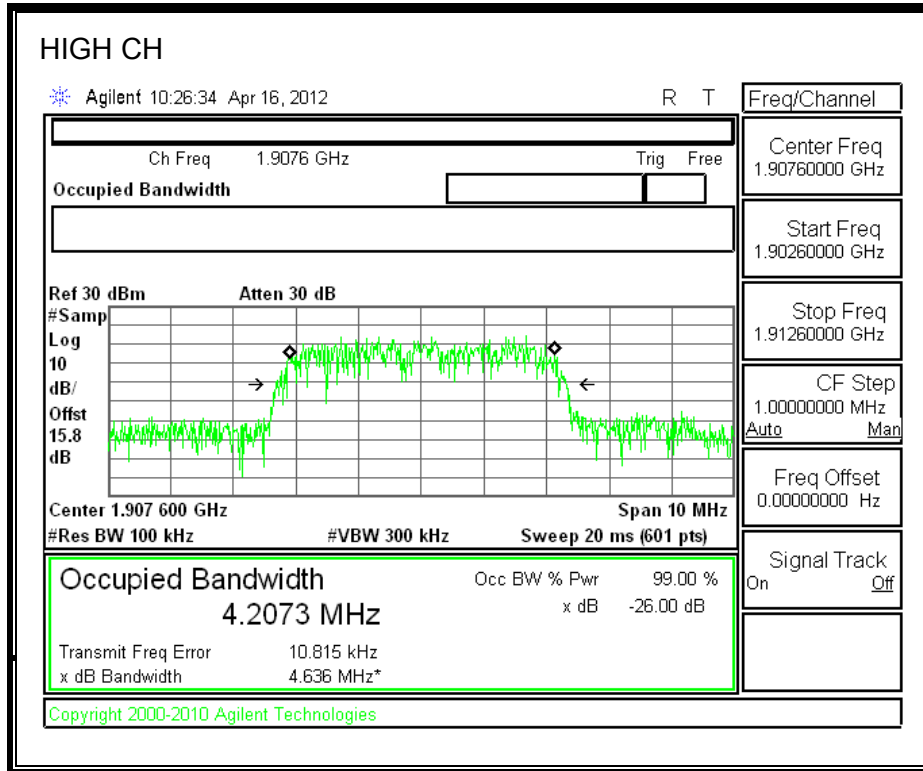
**EGPRS 1900 Mode (PCS Band)**





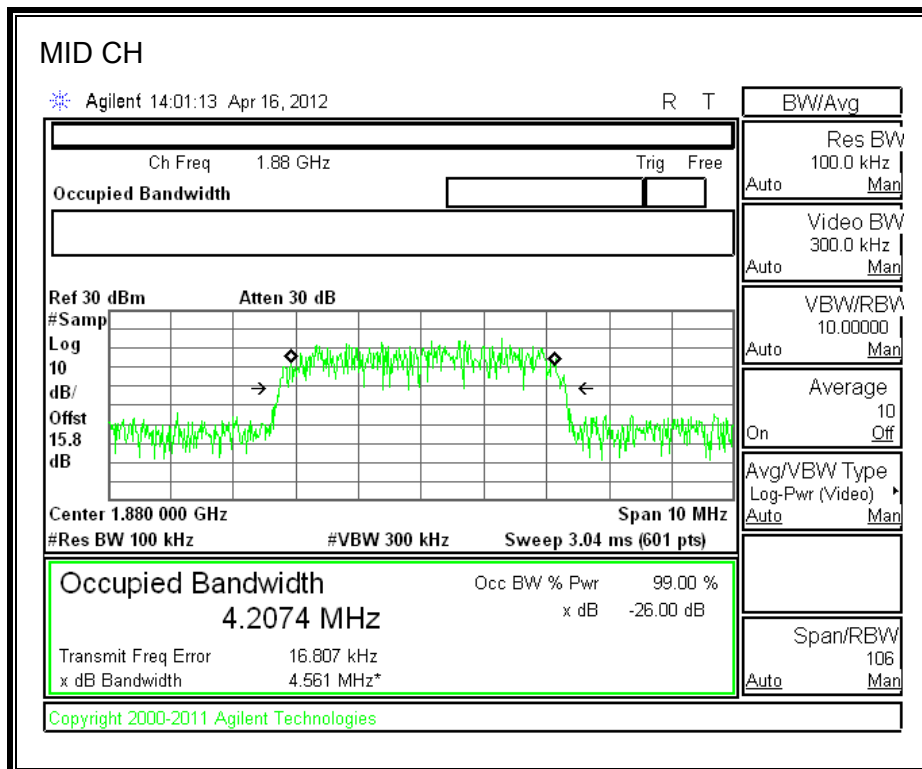
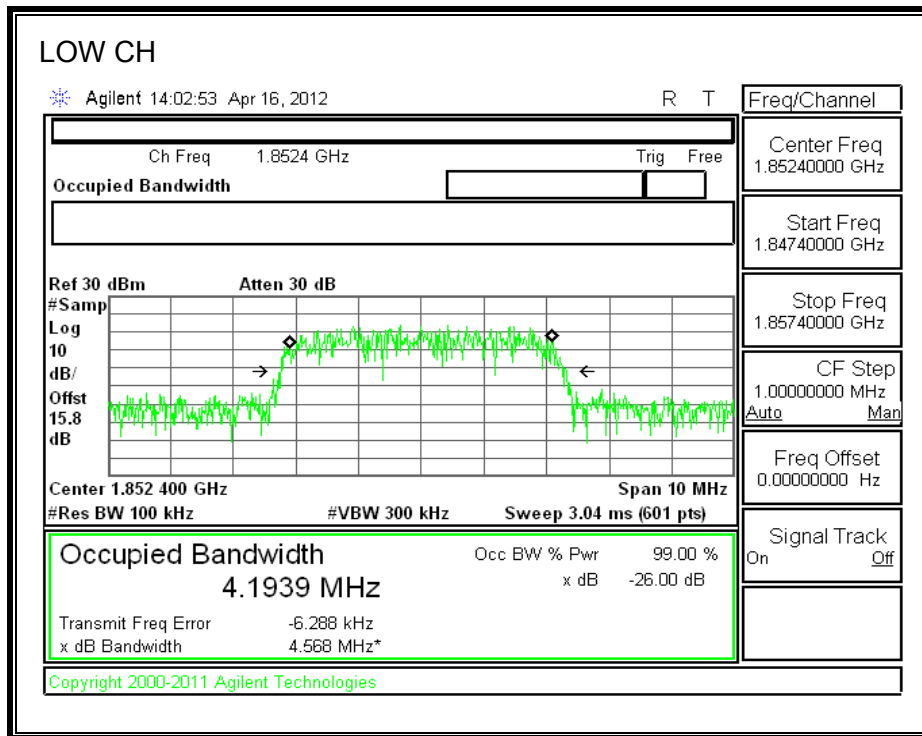
**WCDMA REL 99 Mode (PCS Band)**

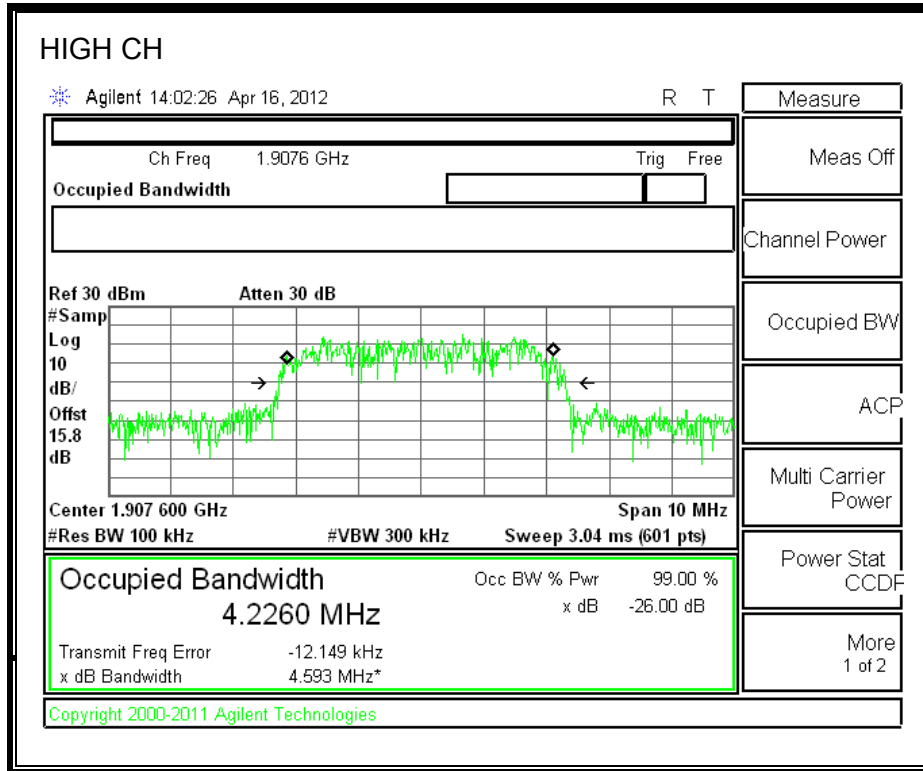




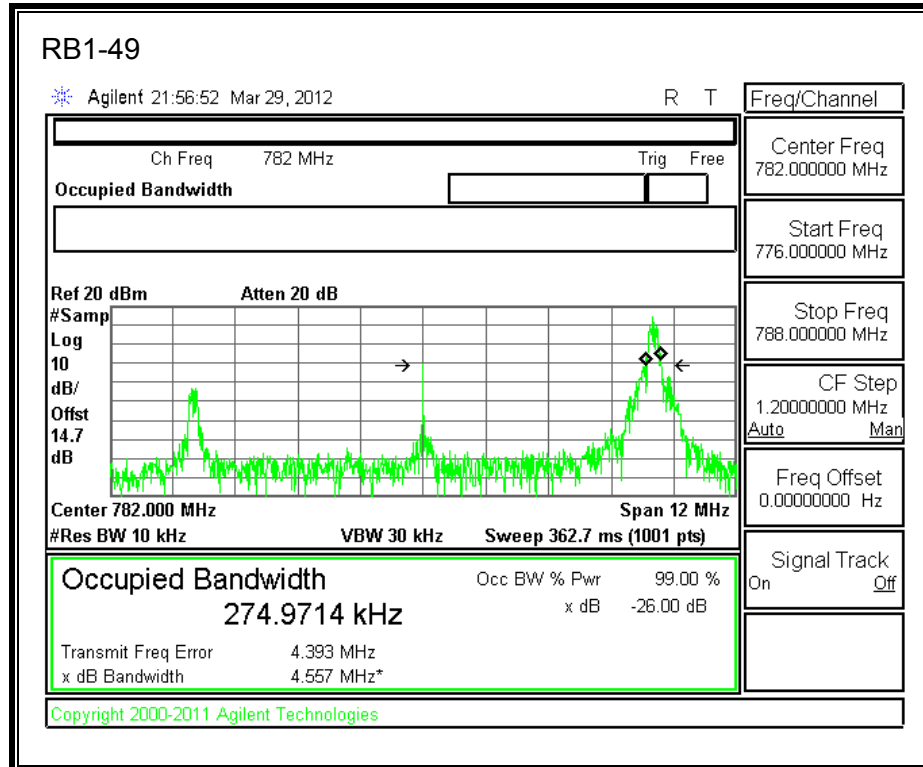
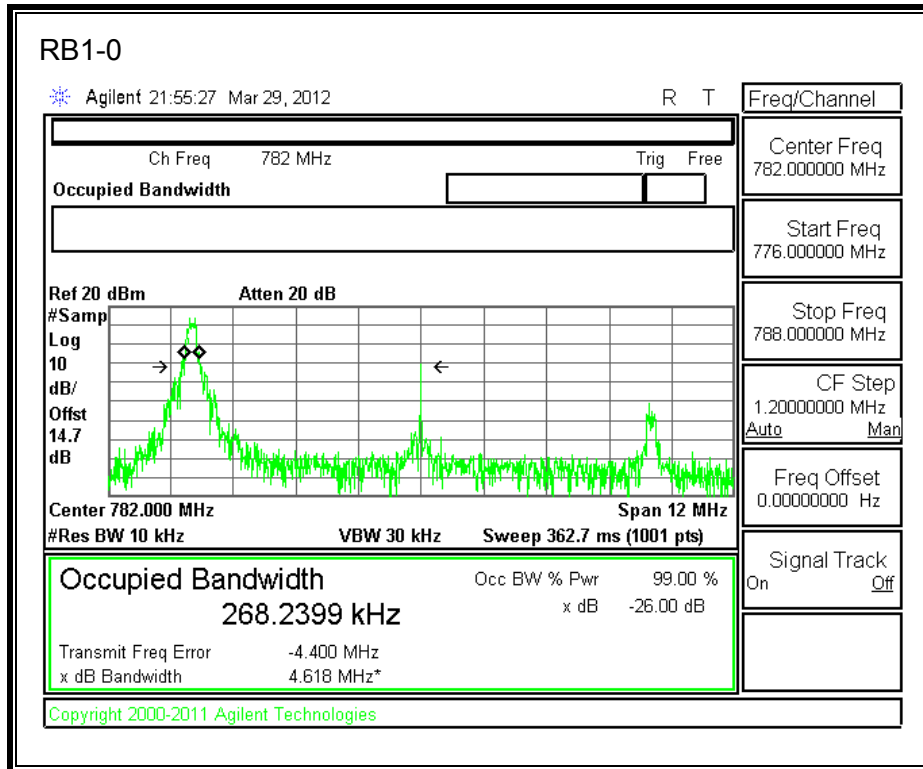


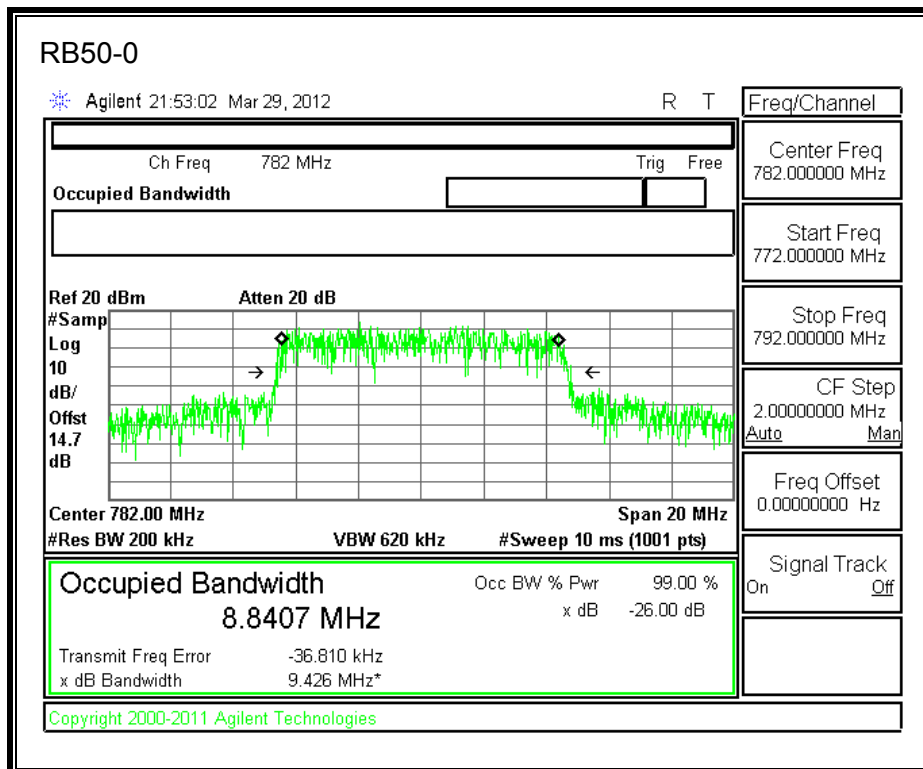
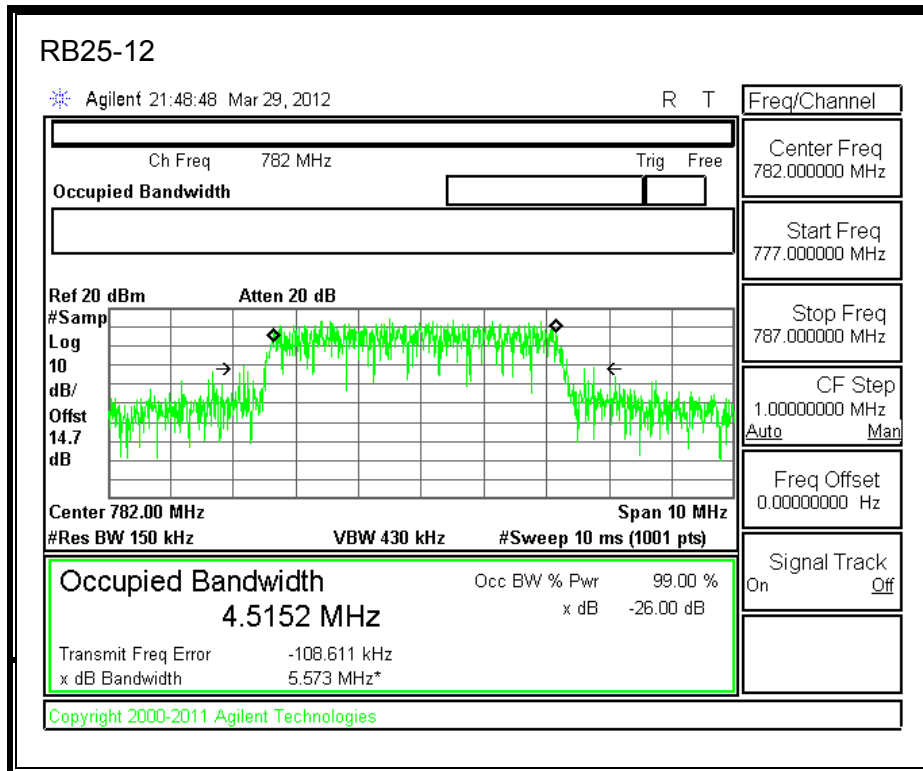
**WCDMA HSDPA Mode (PCS Band)**



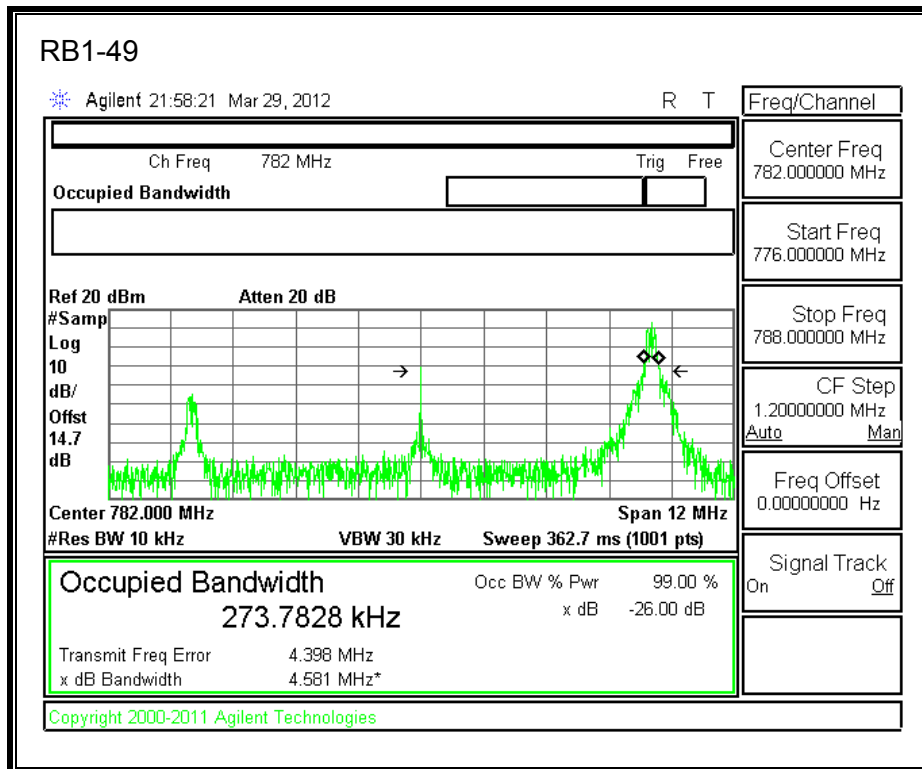
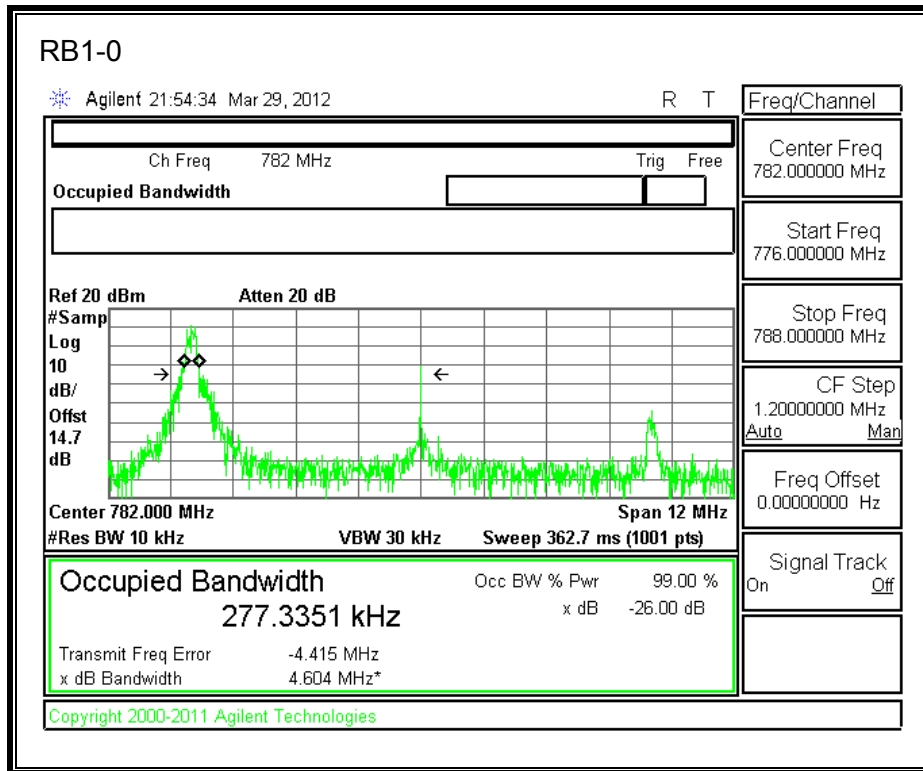


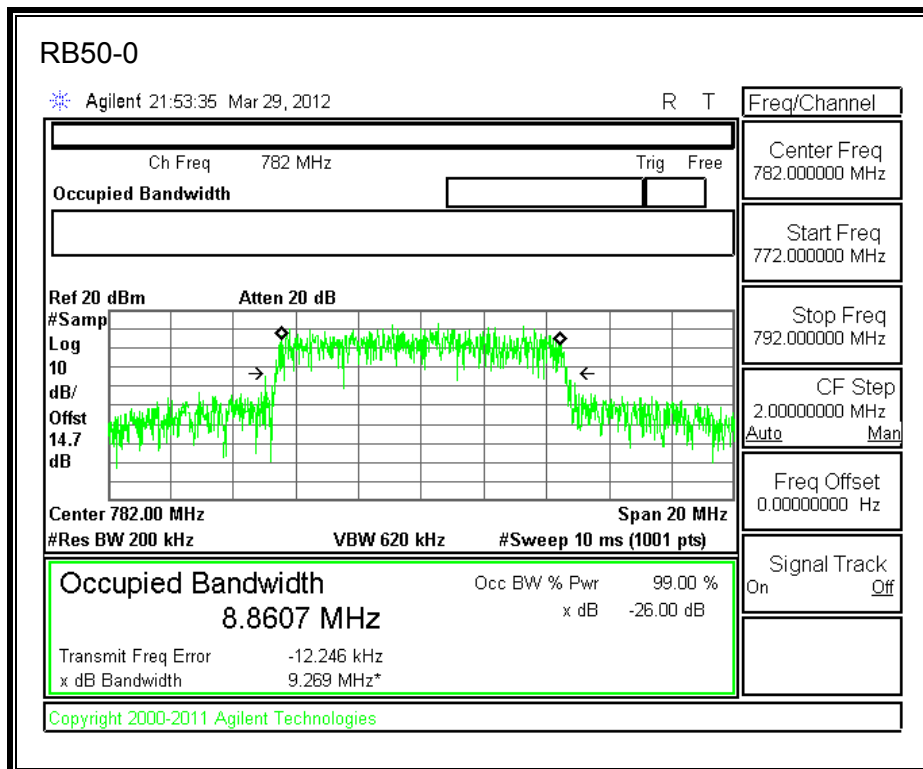
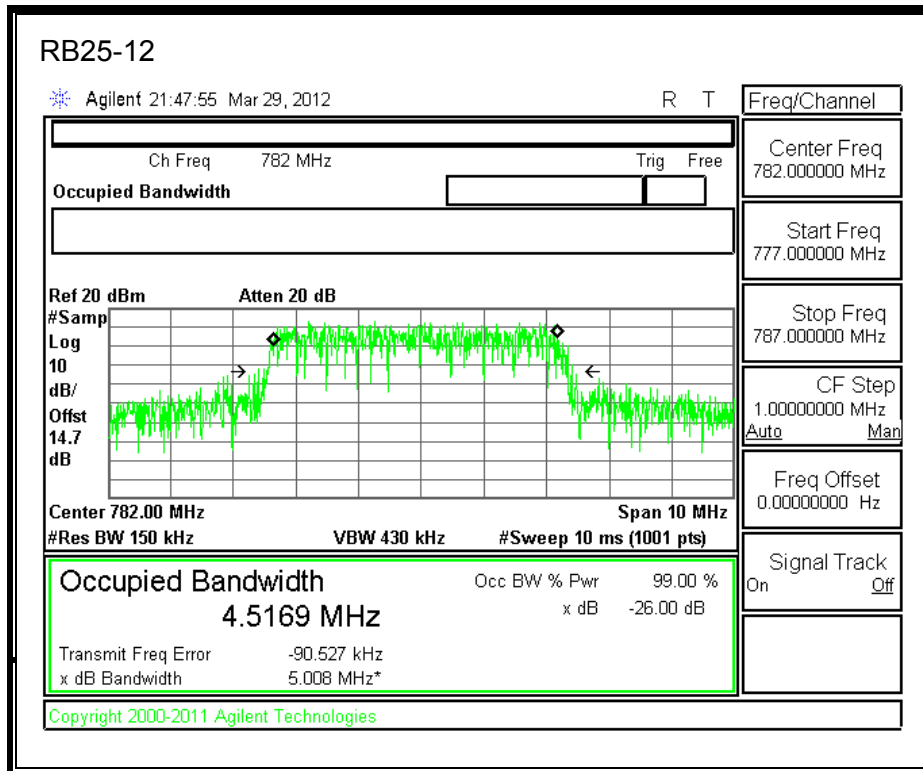
**LTE QPSK Band 13**





**LTE 16QAM Band 13**





## 8.2. BAND EDGE

### RULE PART(S)

FCC: §22.359, 24.238 and 27.53©

### LIMITS

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.

On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least  $43 + 10 \log (P)$  dB;

On all frequencies between 763–775 MHz and 793–805 MHz, by a factor not less than  $65 + 10 \log (P)$  dB in a 6.25 kHz band segment, for mobile and portable stations.

Compliance with the provisions of paragraphs above of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed; Correction Factor =  $10 * \log(100/6.25\text{kHz}) = 12.04\text{dB}$ , therefore the limit =  $-55 + 12 = -33\text{dBm}$ .

### TEST PROCEDURE

The transmitter output was connected to an Agilent 8960 and CMW500 Test Set and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.

For each band edge measurement:

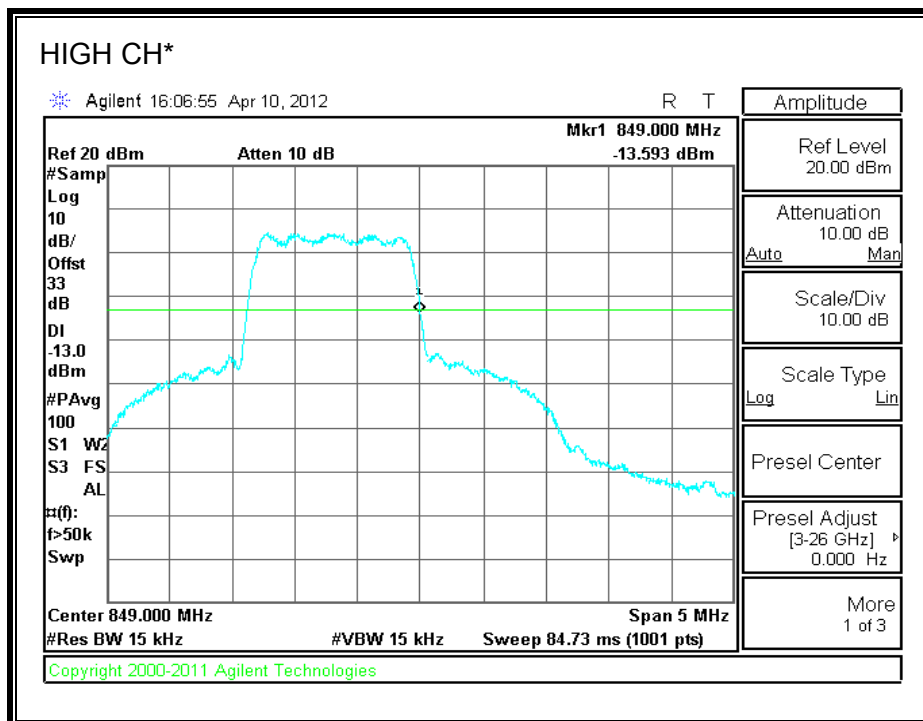
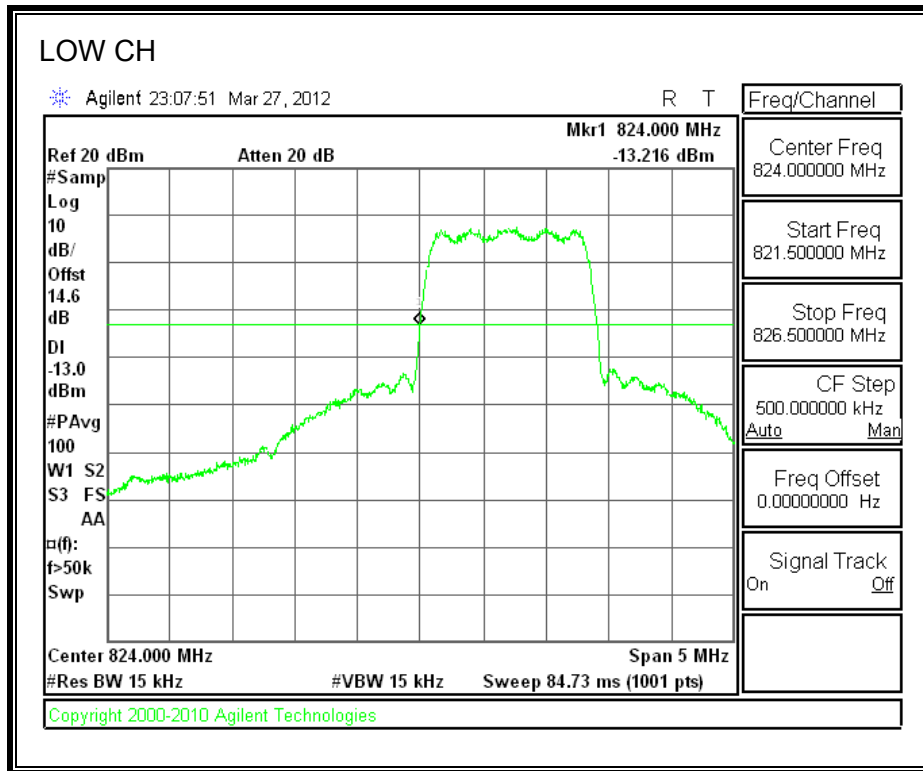
- Set the spectrum analyzer span to include the block edge frequency (824, 848, 1850, 1910MHz)
- Set a marker to point the corresponding band edge frequency in each test case.
- Set display line at -13 dBm
- Set resolution bandwidth to at least 1% of emission bandwidth.

### MODES TESTED

- 1xRTT – RC1 SO55
- CDMA2000 1xEV-DO (Rev. A)
- GPRS and EGPRS
- UMTS, REL 99 and HSDPA
- LTE Band 13

### RESULTS

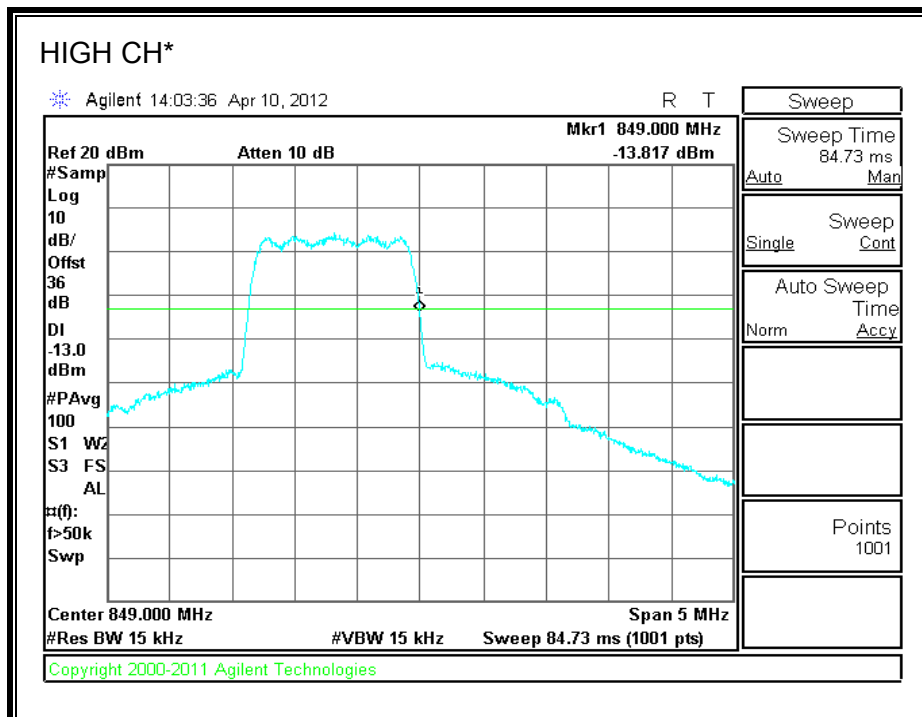
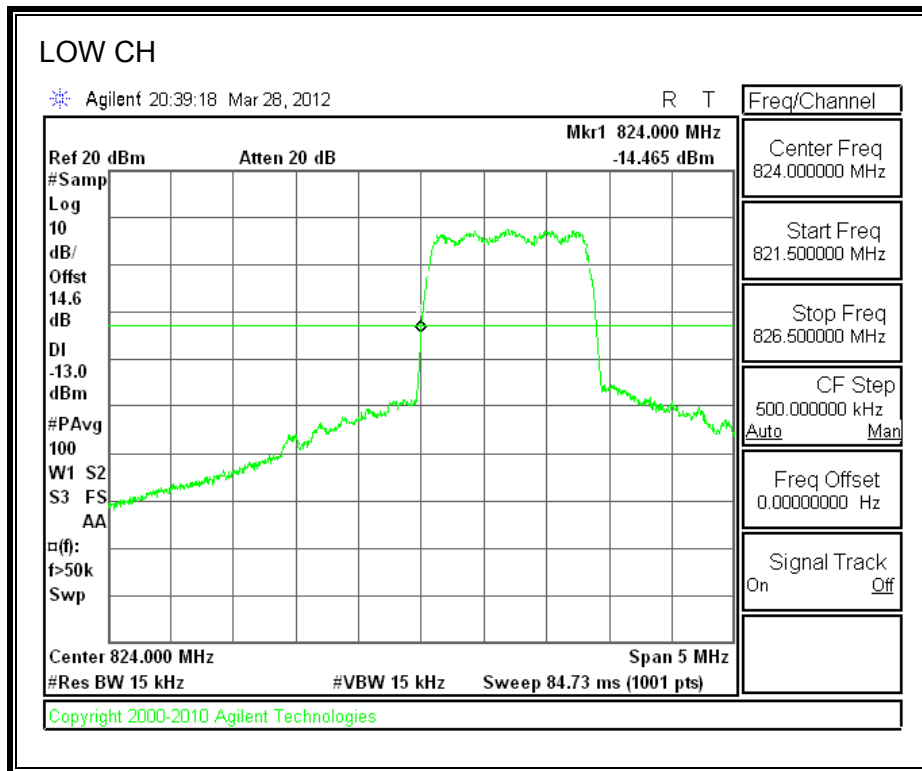
**CDMA2000 1xRTT mode (Cellular Band)**



\*Note: This particular test has made using radiated method with real substitution.

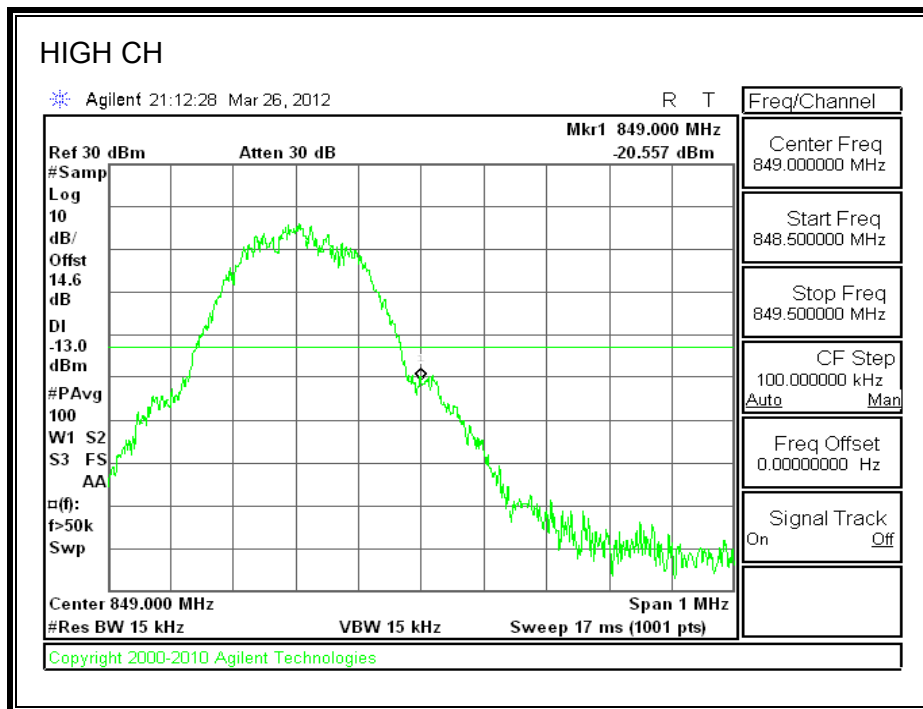
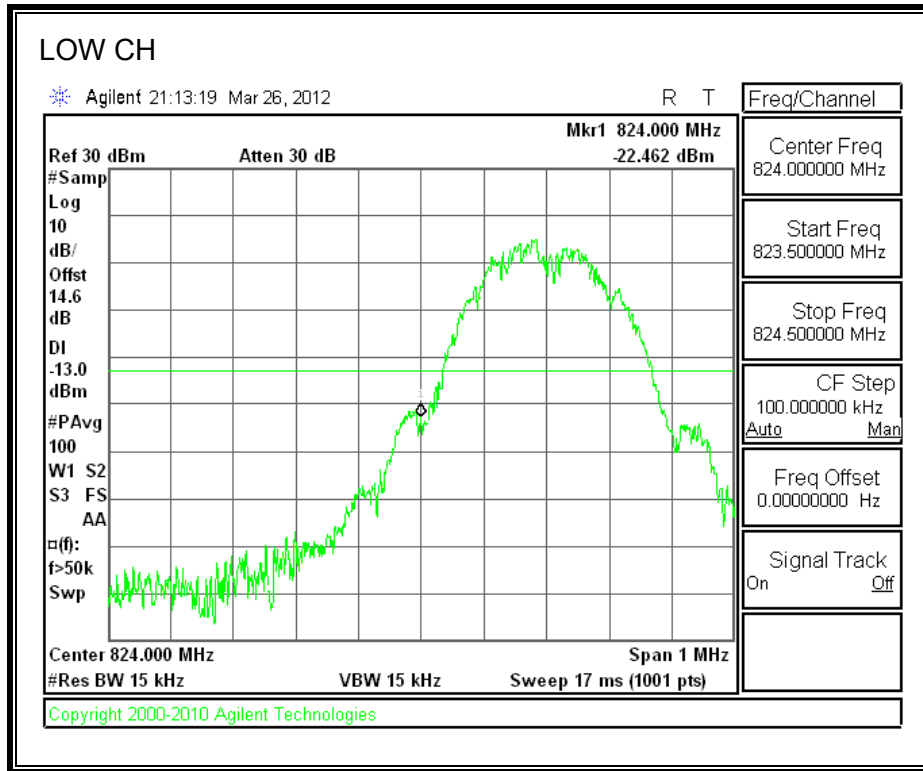


**CDMA2000 1xEV-DO Revision A (Rev. A) mode (Cellular Band)**

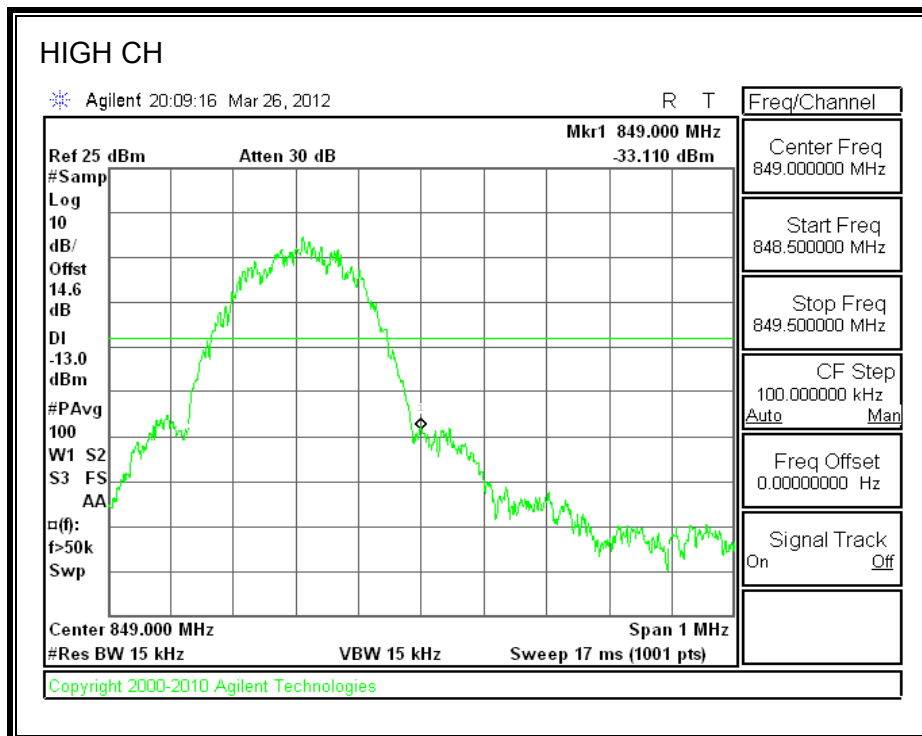
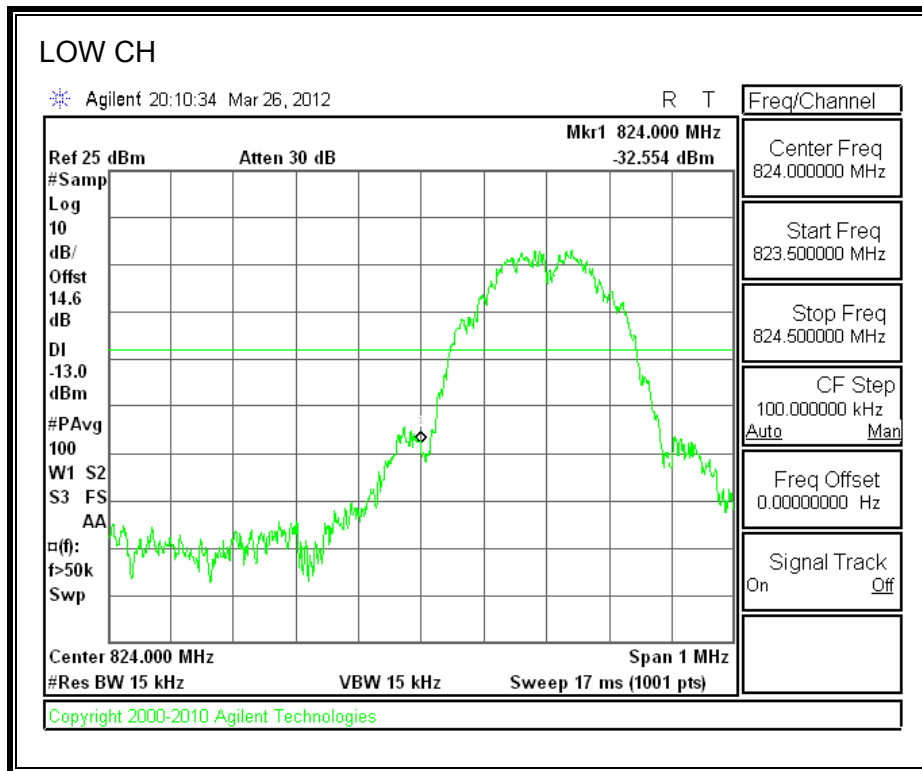


\*Note: This particular test has made using radiated method with real substitution

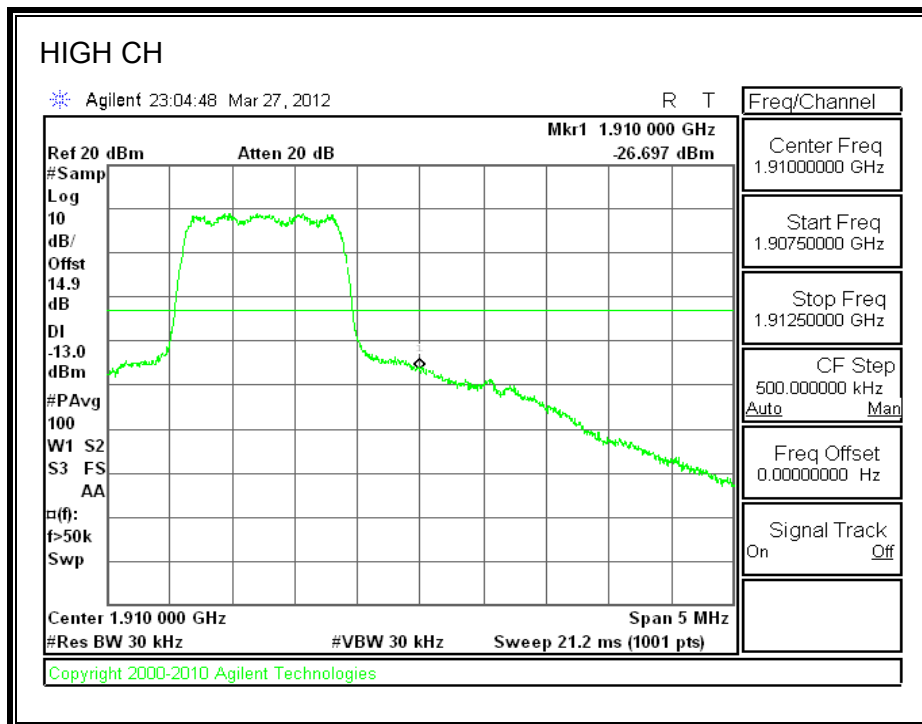
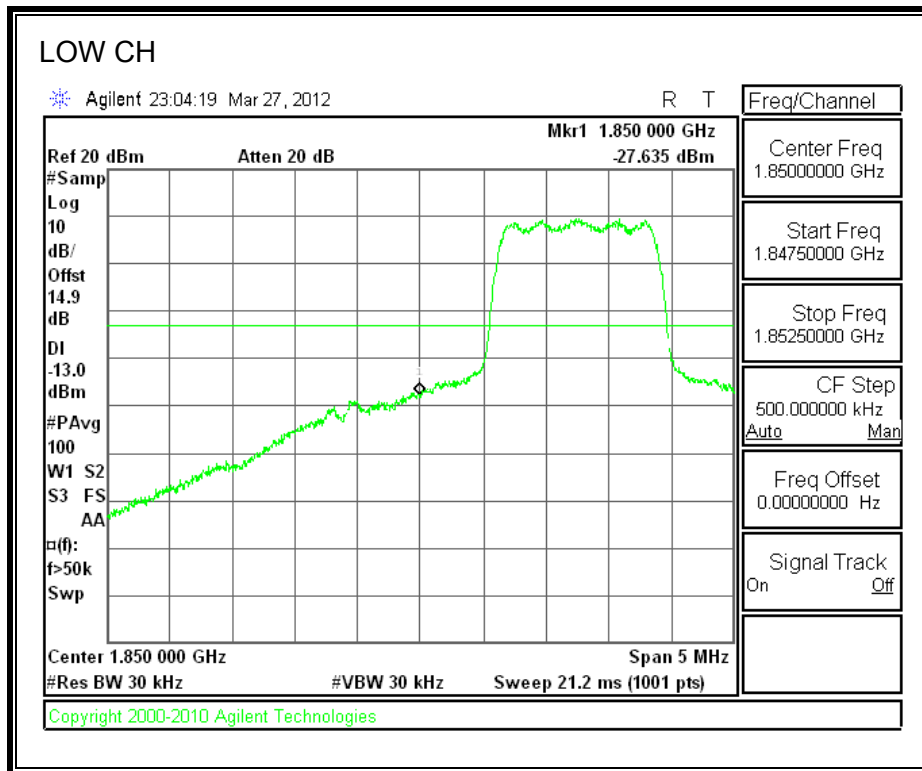
**GPRS mode (Cellular Band)**



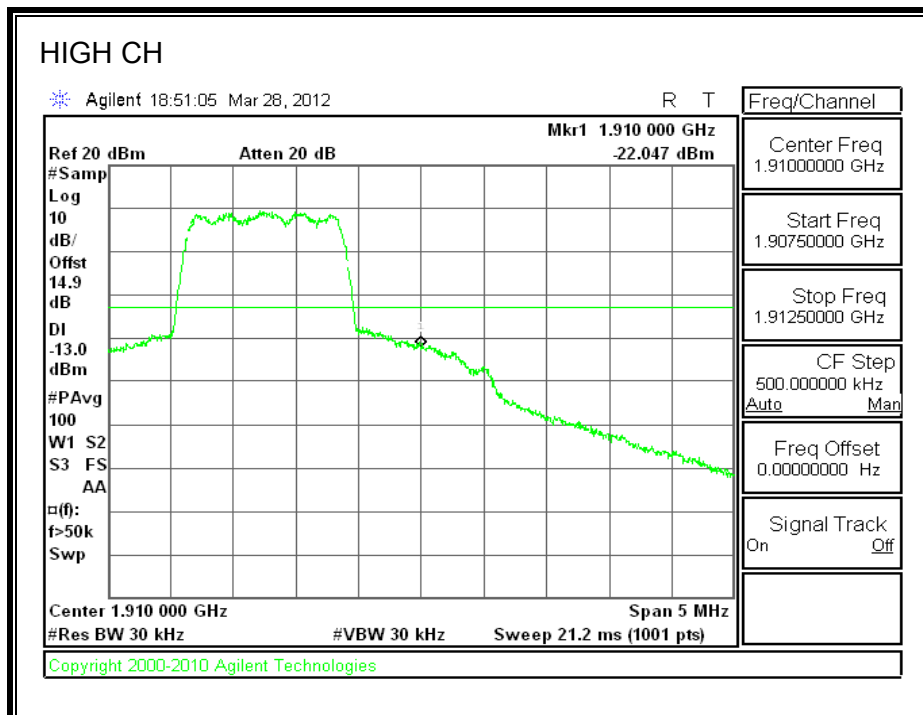
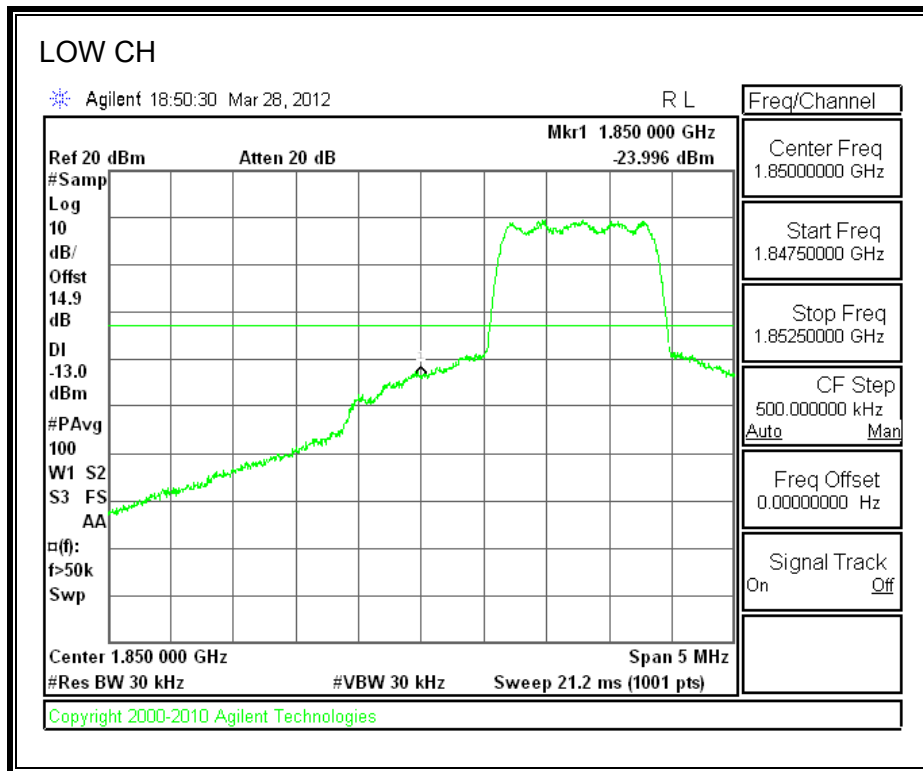
**EGPRS mode (Cellular Band)**



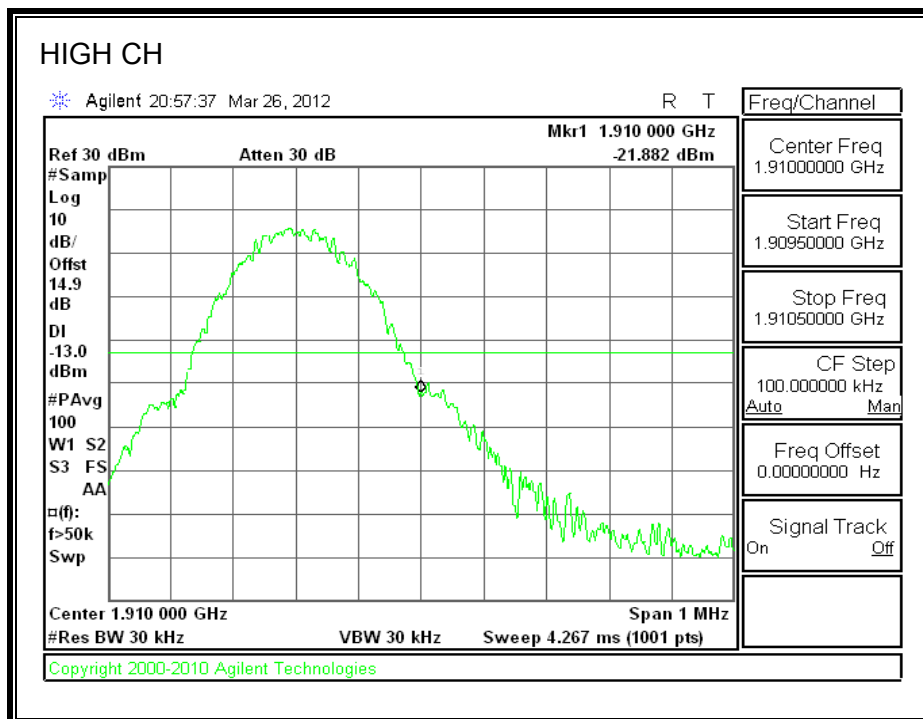
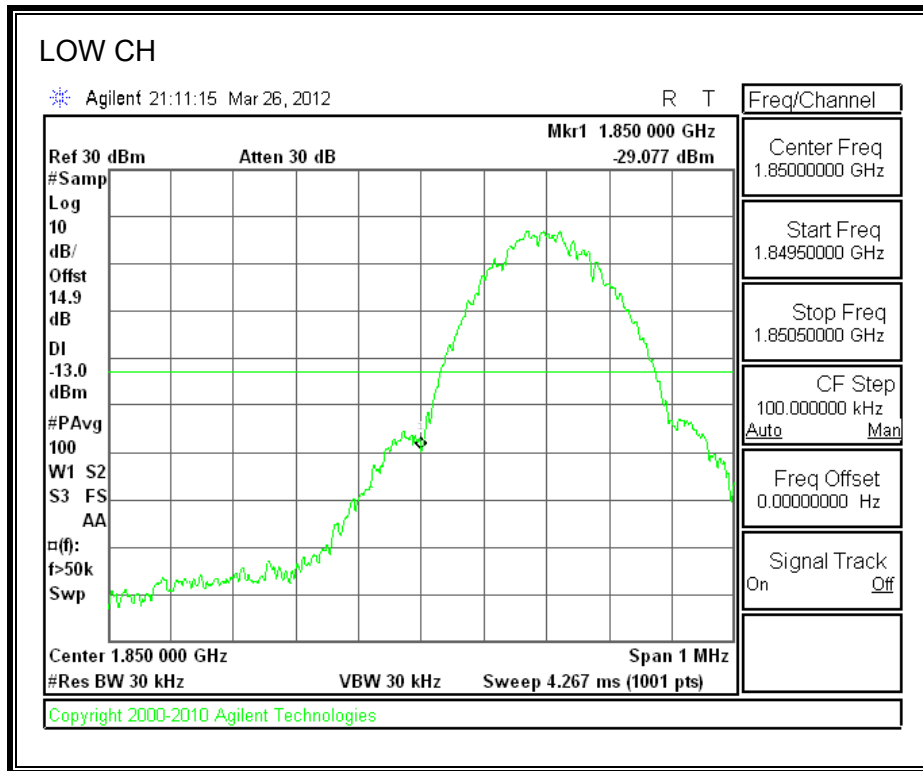
**CDMA2000 1xRTT mode (PCS Band)**



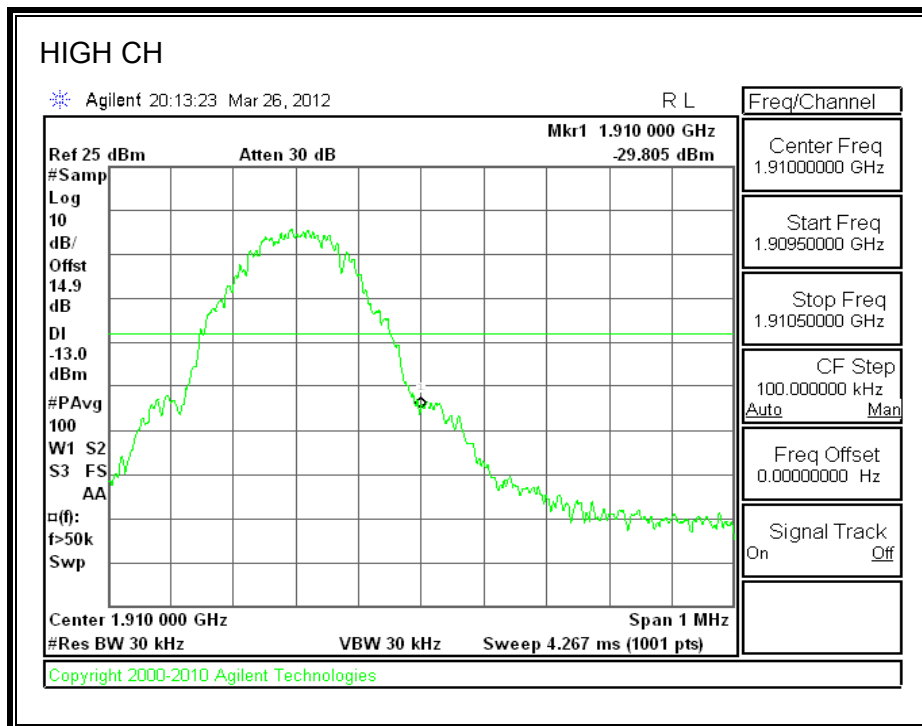
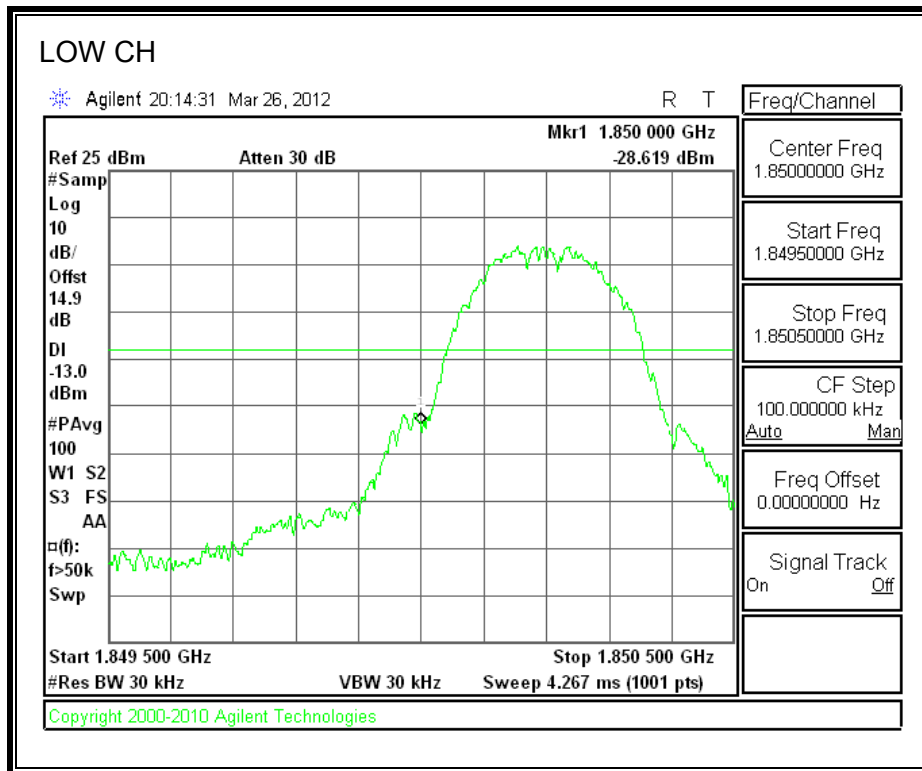
**CDMA2000 1xEV-DO Revision A (Rev. A) mode (PCS Band)**



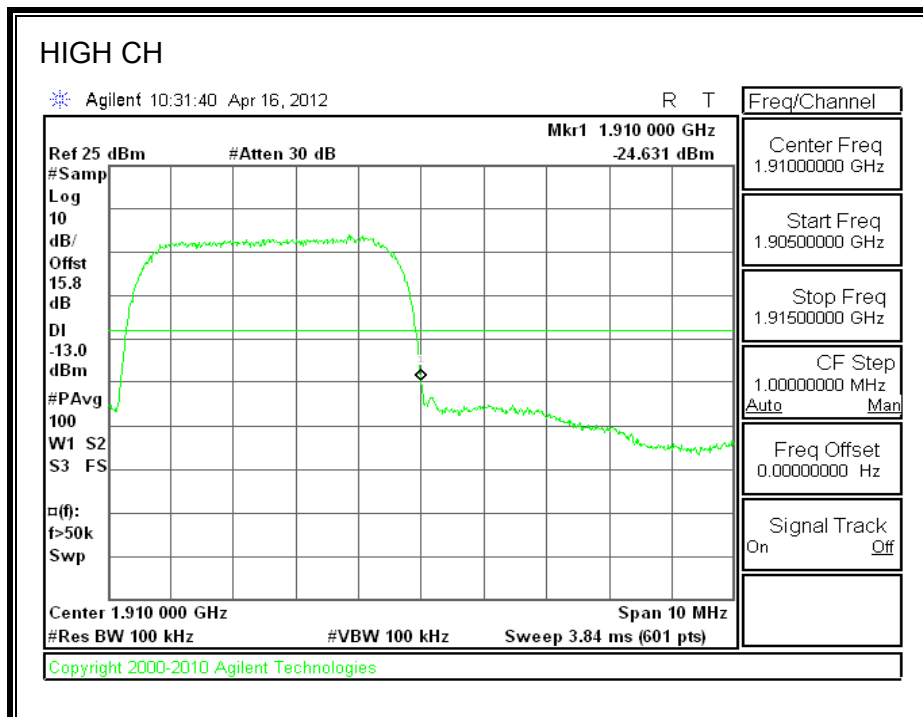
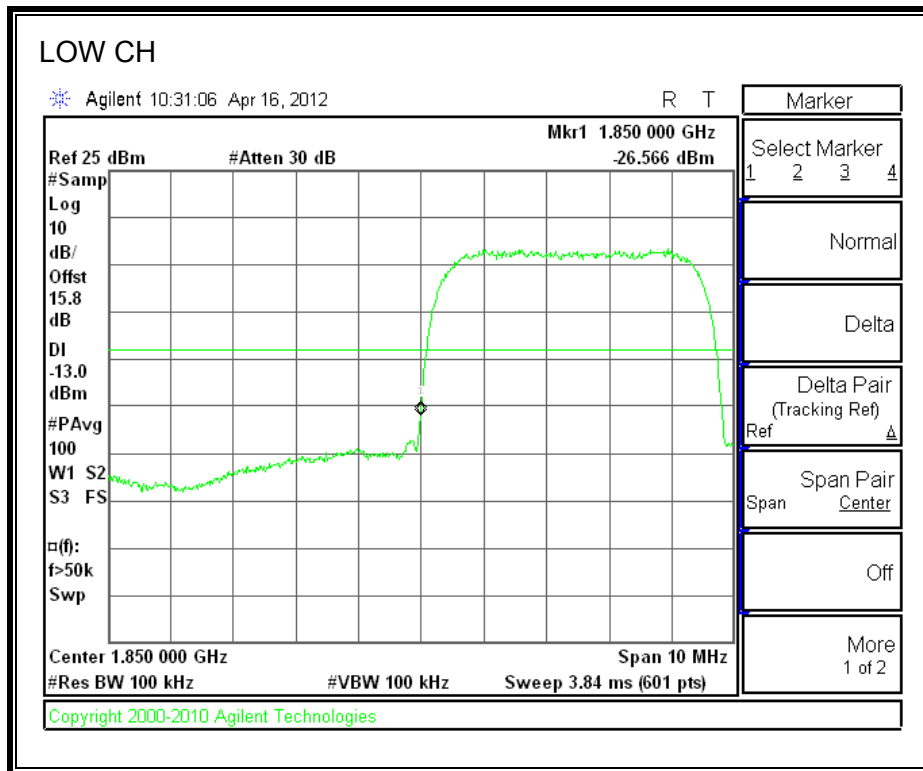
**GPRS mode (PCS Band)**



**EGPRS mode (PCS Band)**

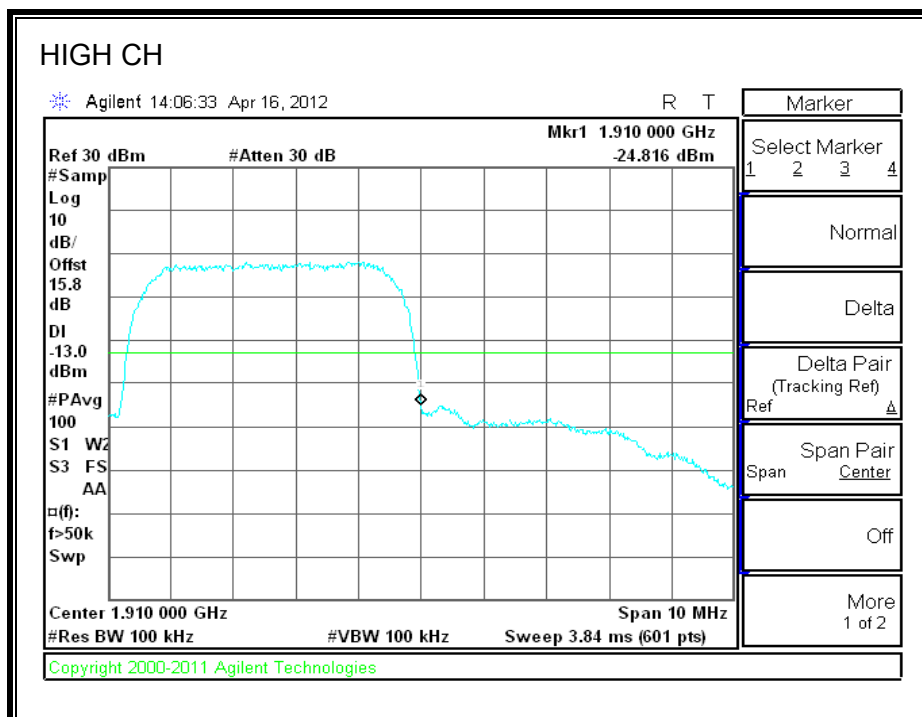
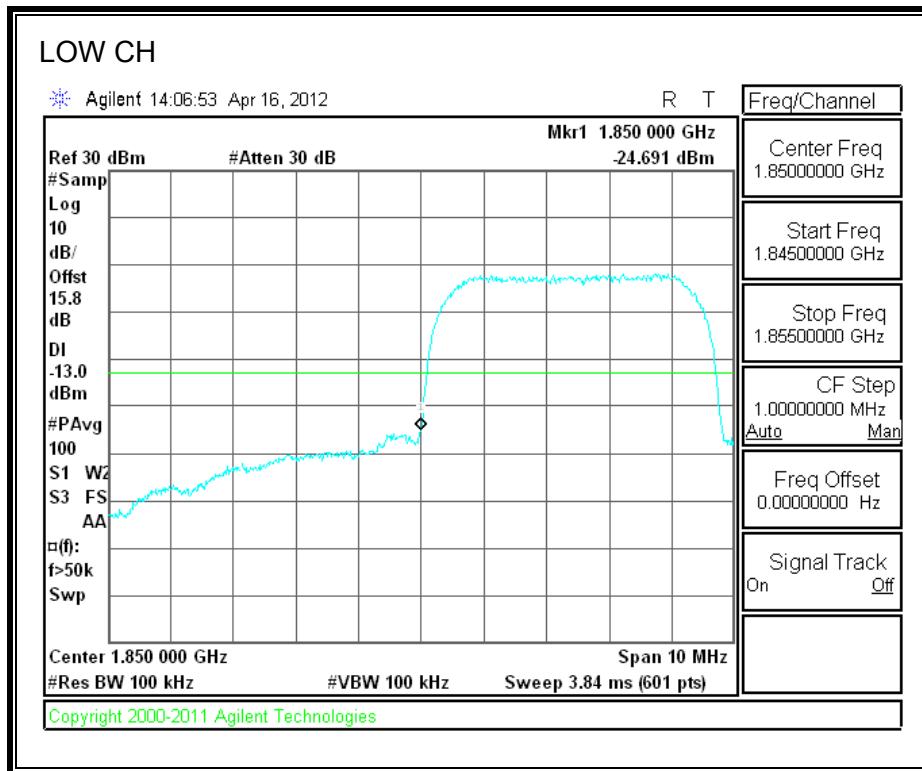


**UMTS REL99 (PCS Band)**

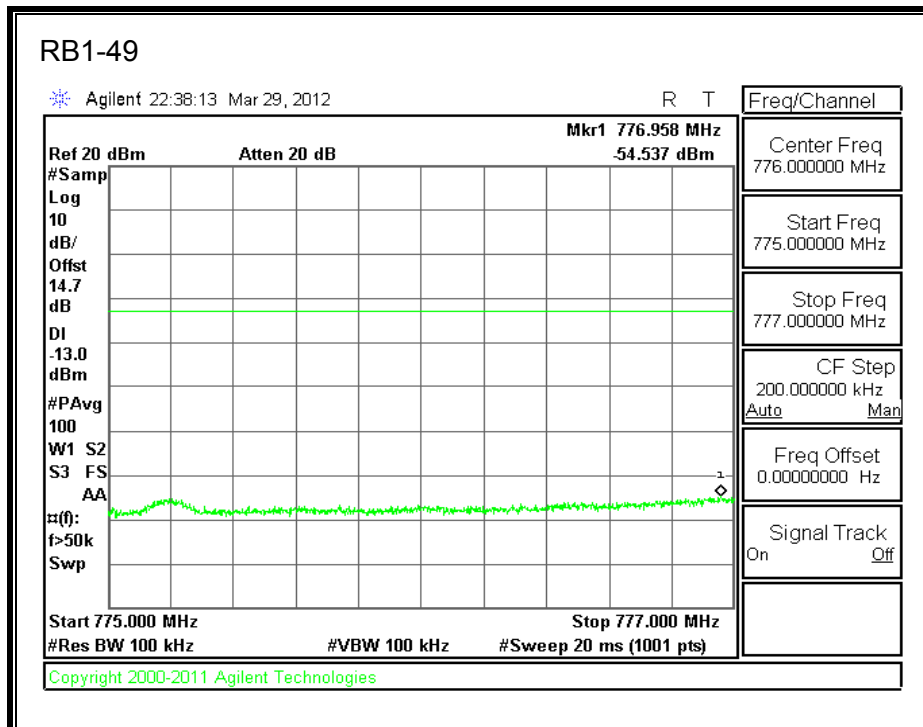
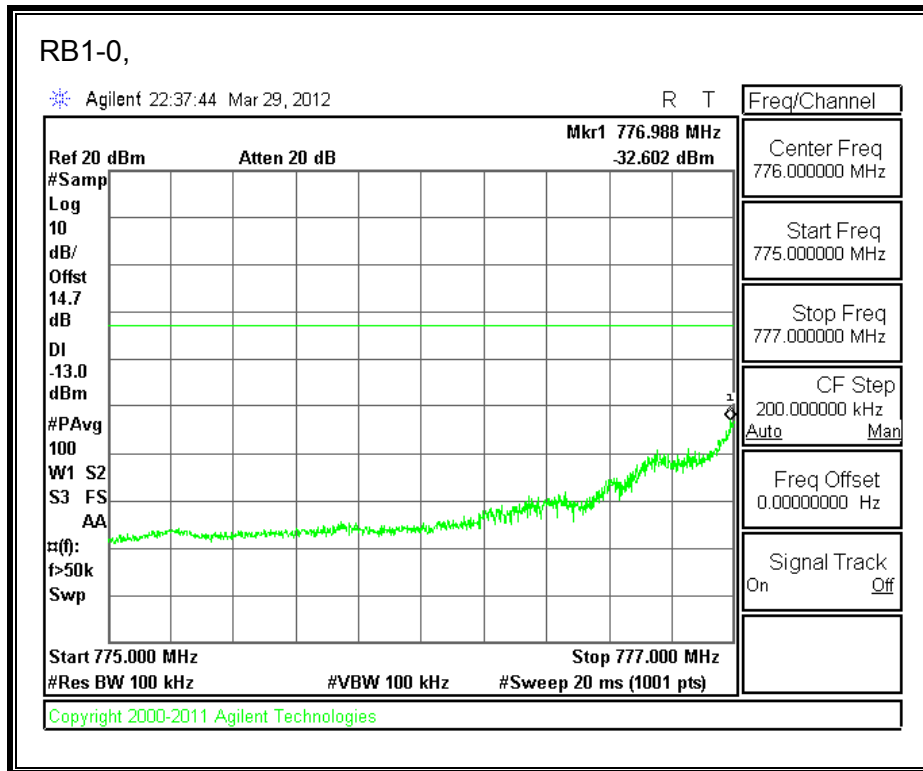


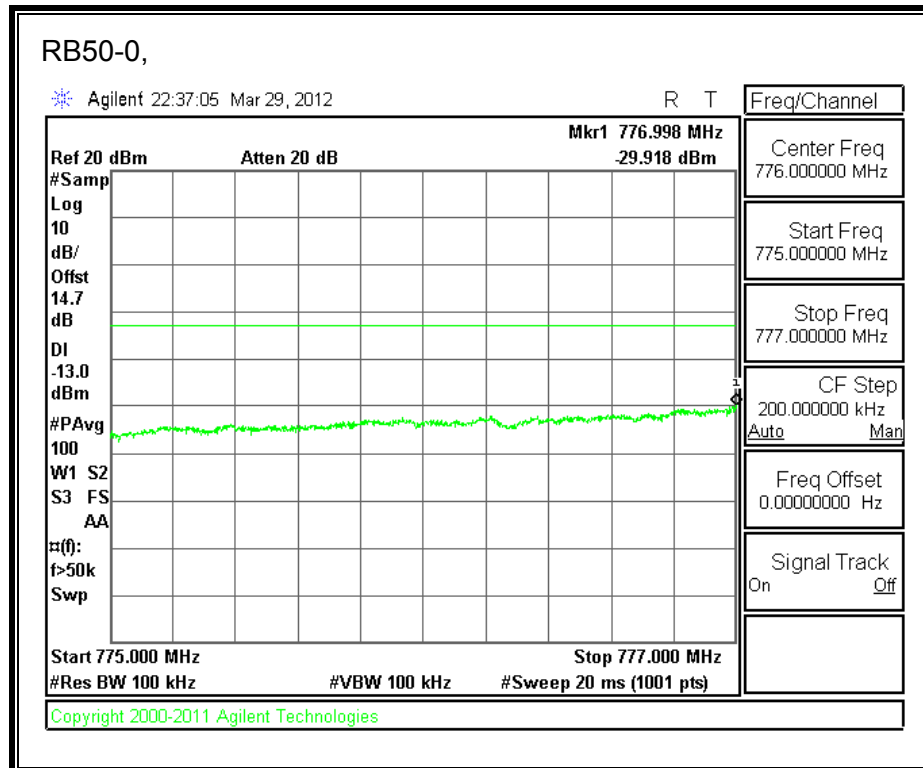
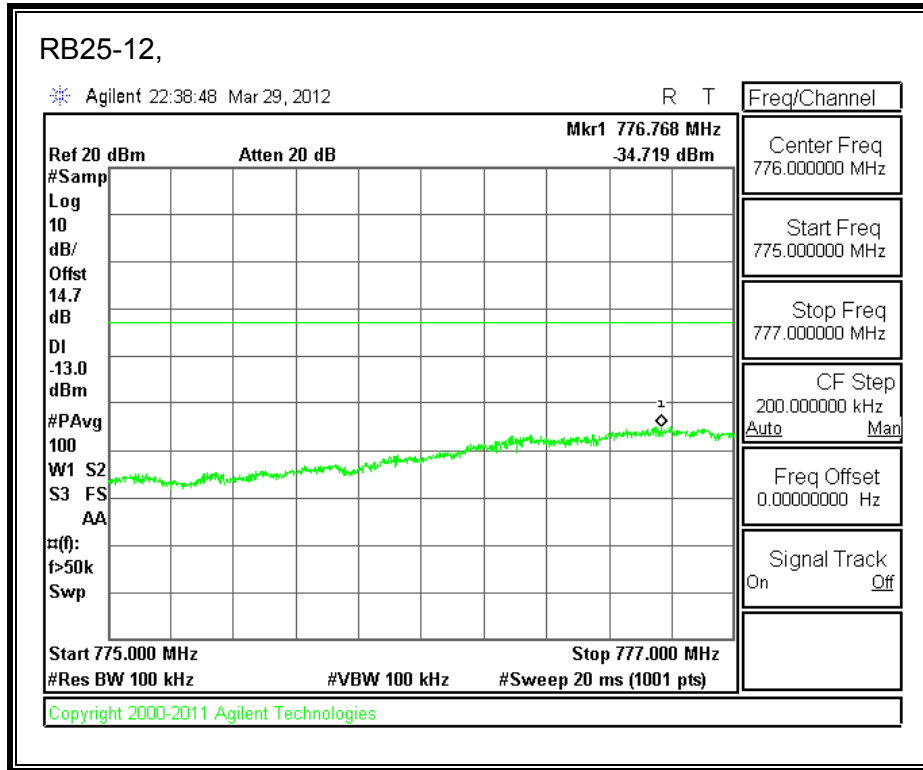


**UMTS HSDPA (PCS Band)**

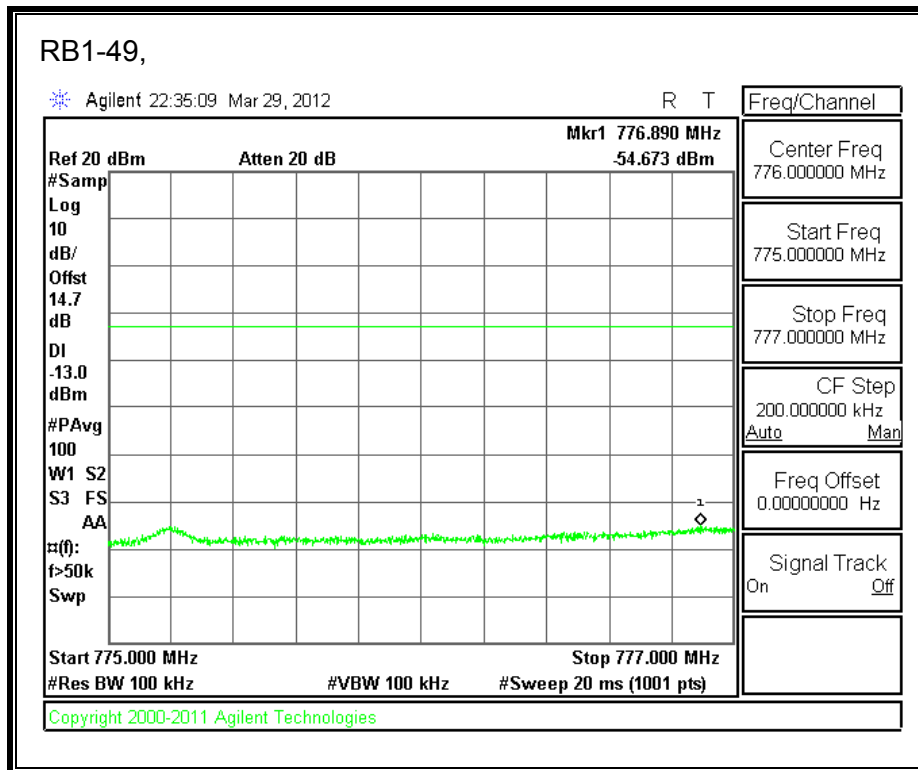
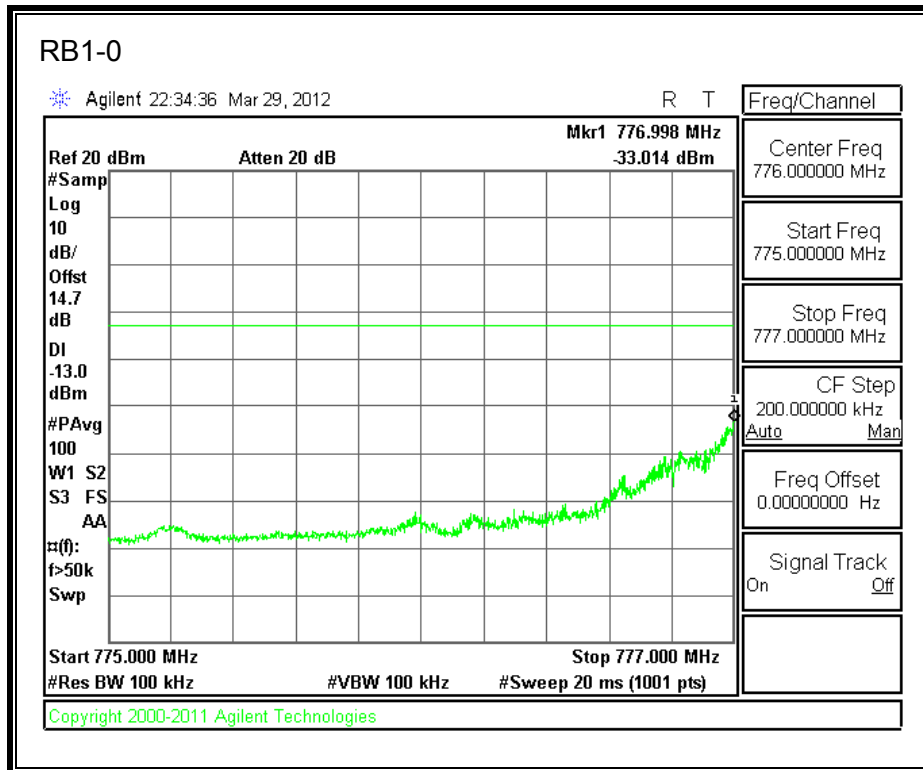


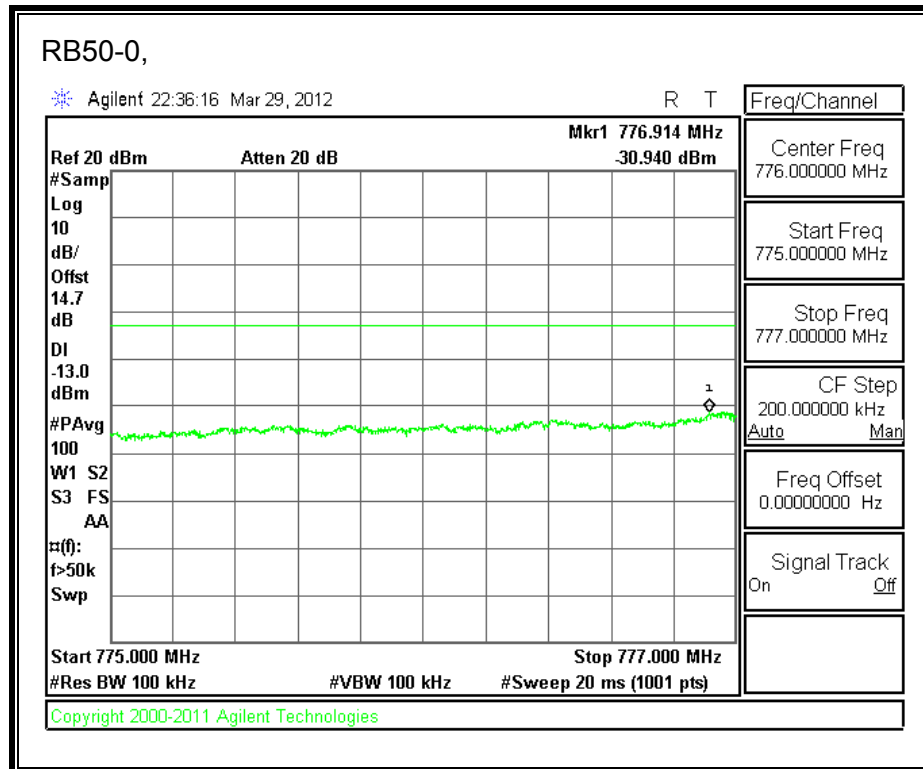
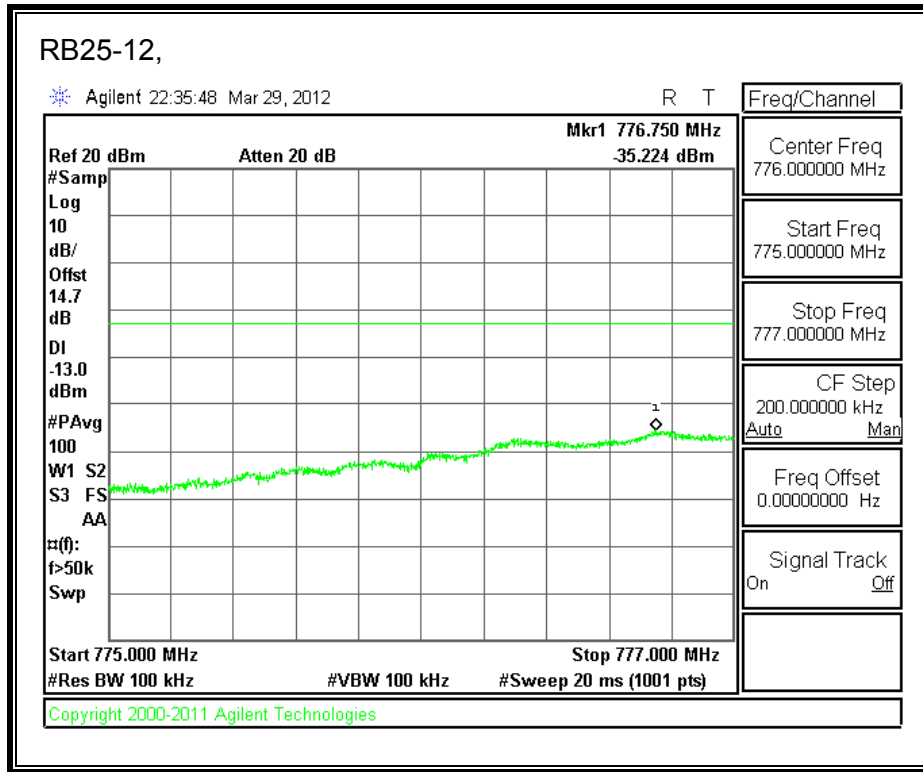
**LTE QPSK 782MHz Band 13, 775 - 777MHz (10MHz Bandwidth)**



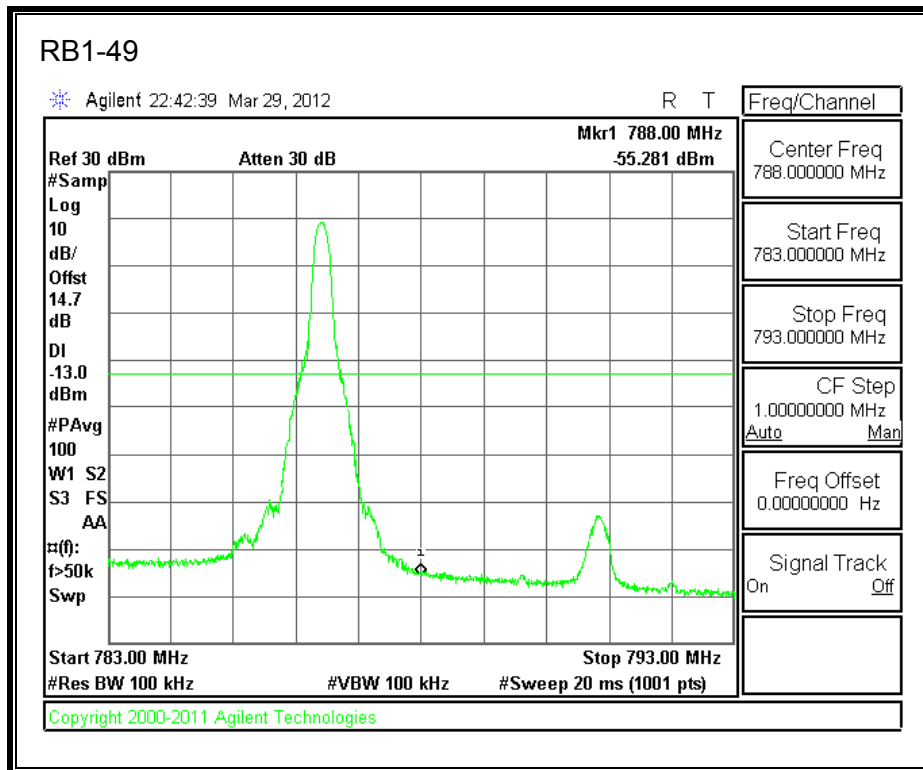
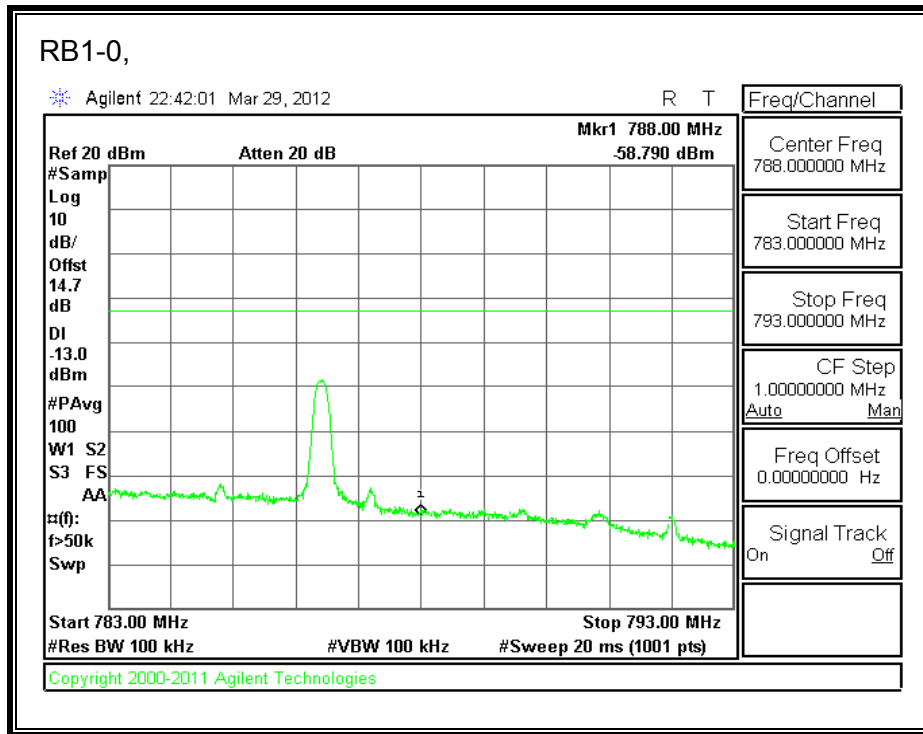


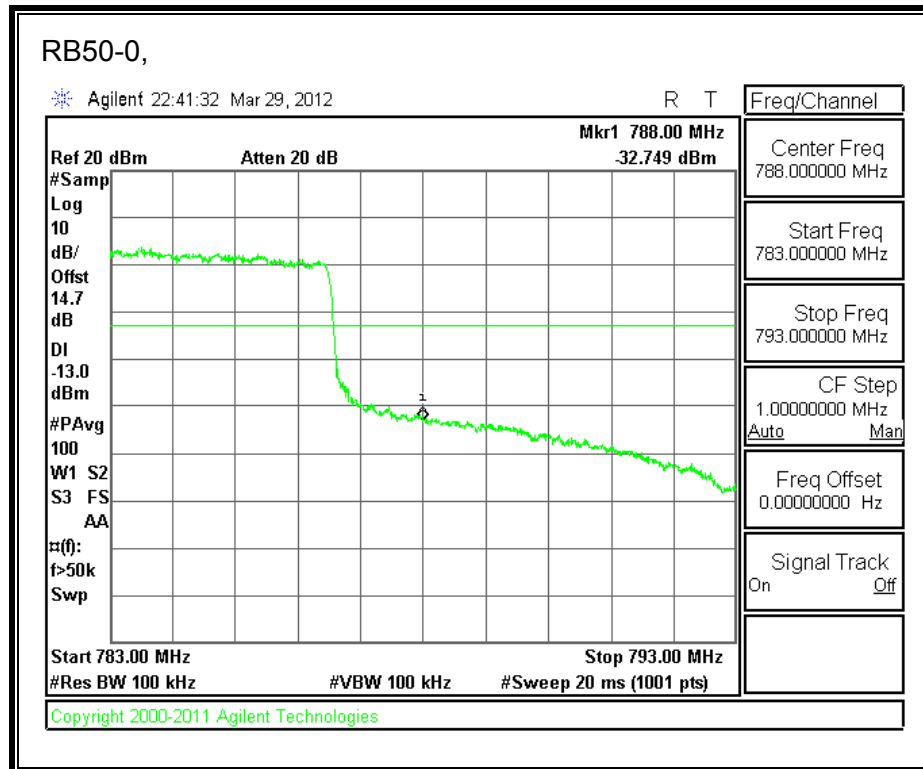
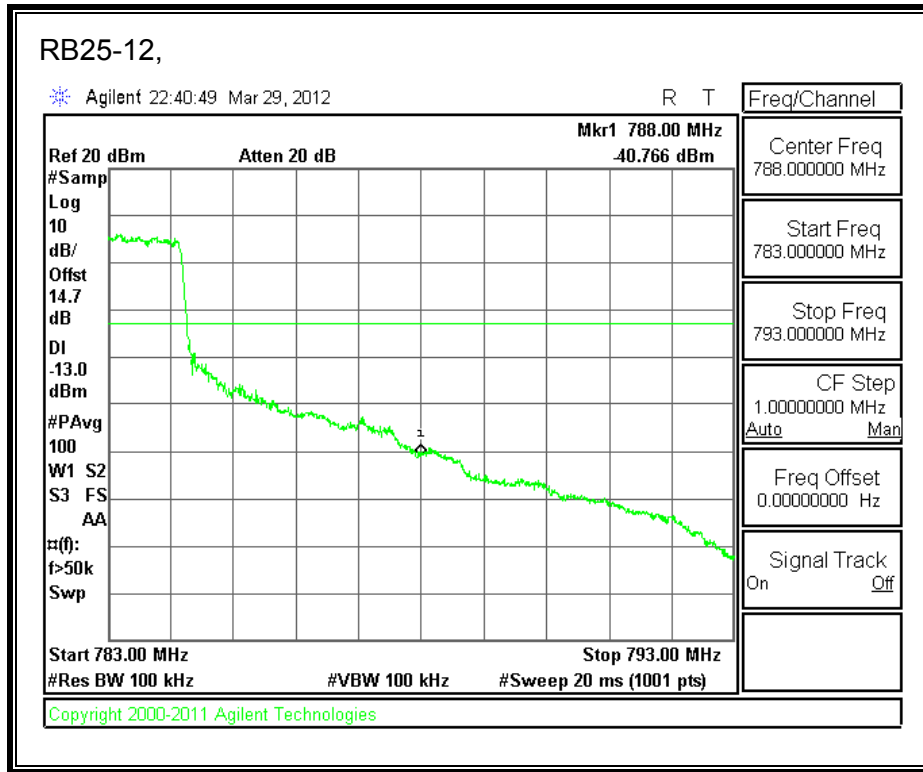
**LTE 16QAM Band 13, 775 - 777MHz (10MHz Bandwidth)**



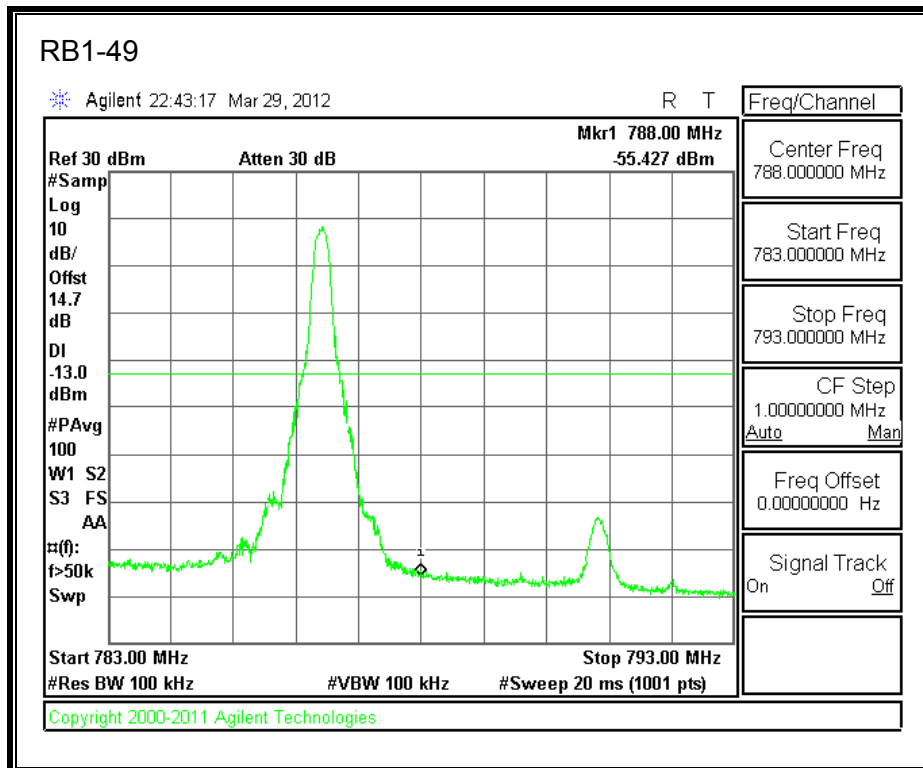
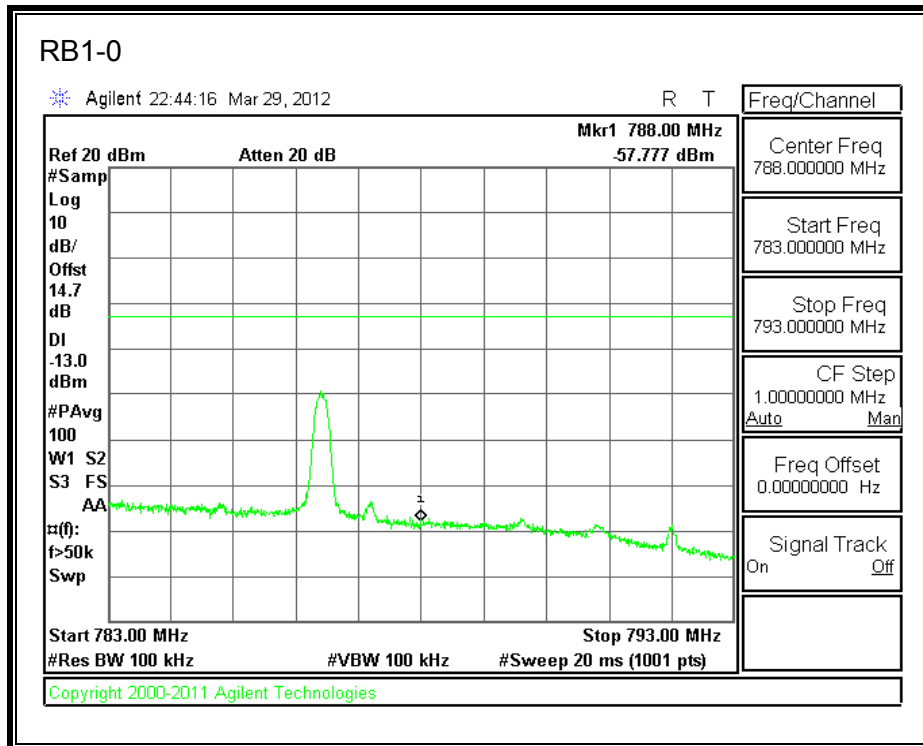


**LTE QPSK 782MHz Band 13, 783 - 793MHz (10MHz Bandwidth)**

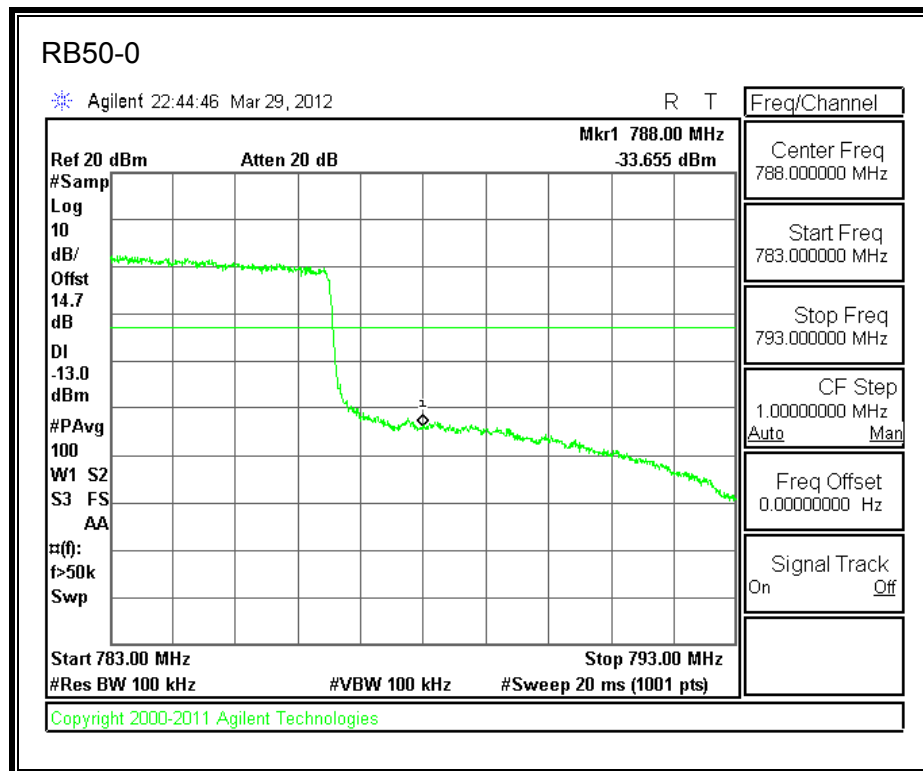
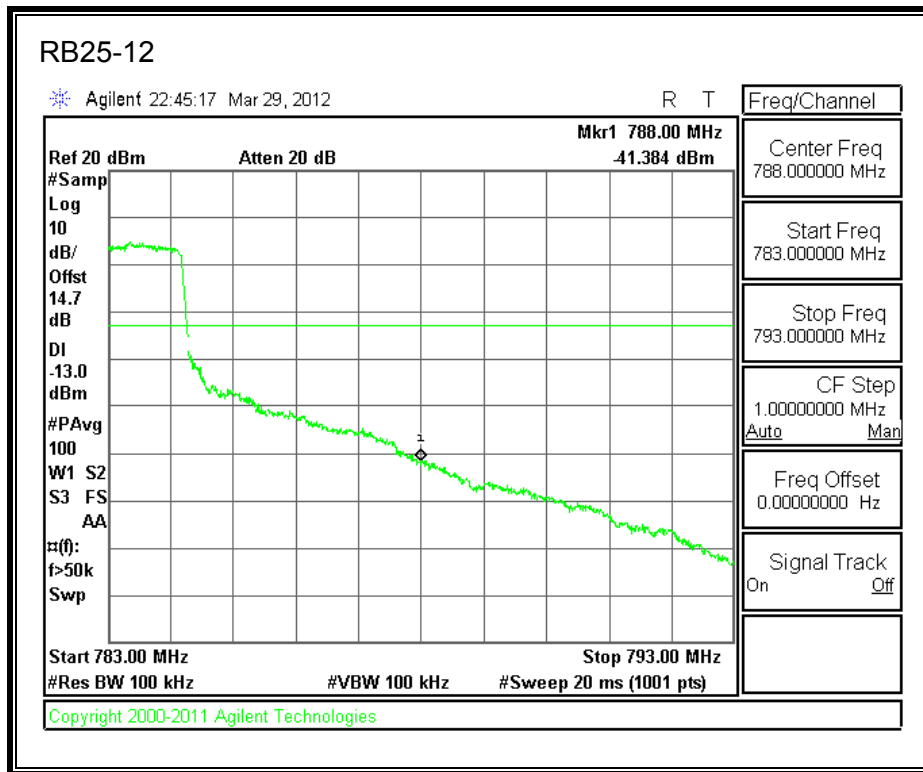




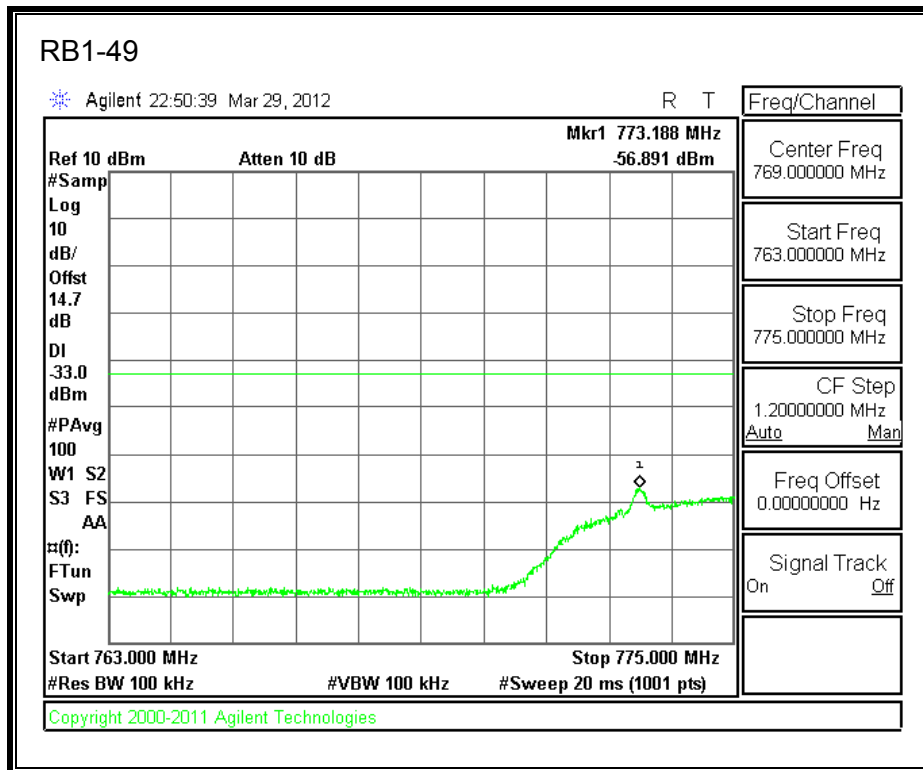
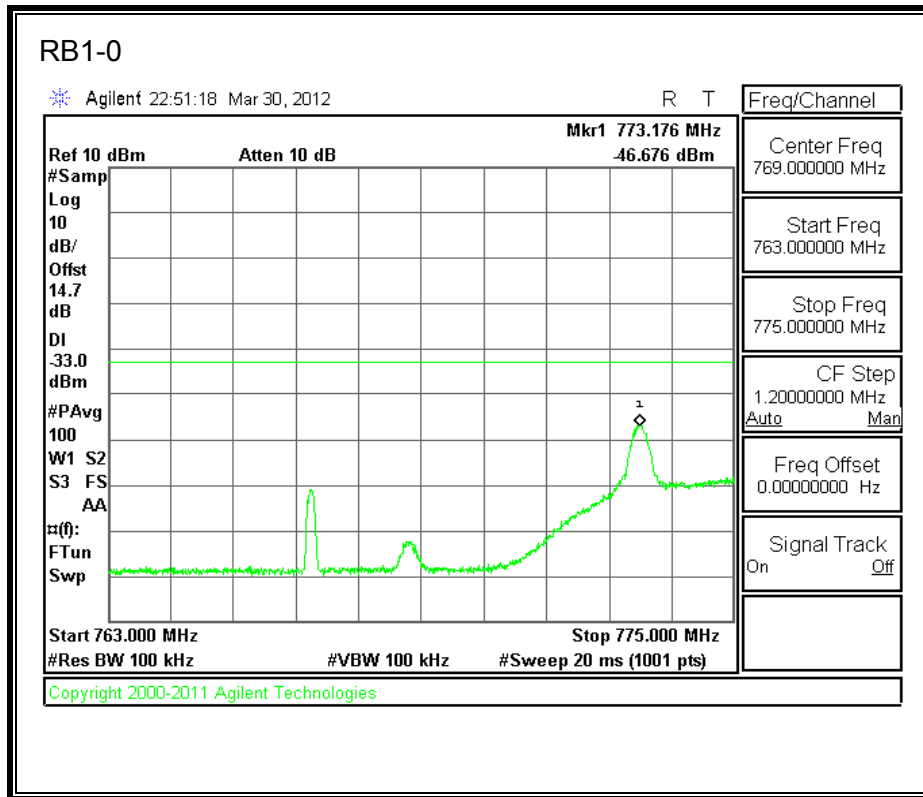
**LTE 16QAM Band 13, 782MHz 783 - 793MHz (10MHz Bandwidth)**

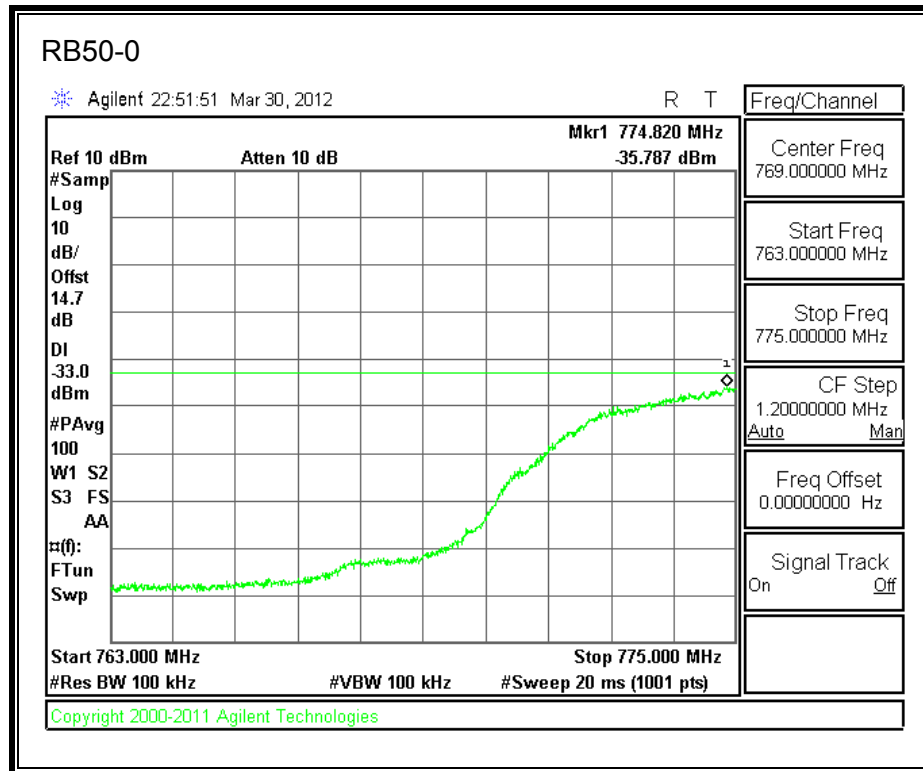
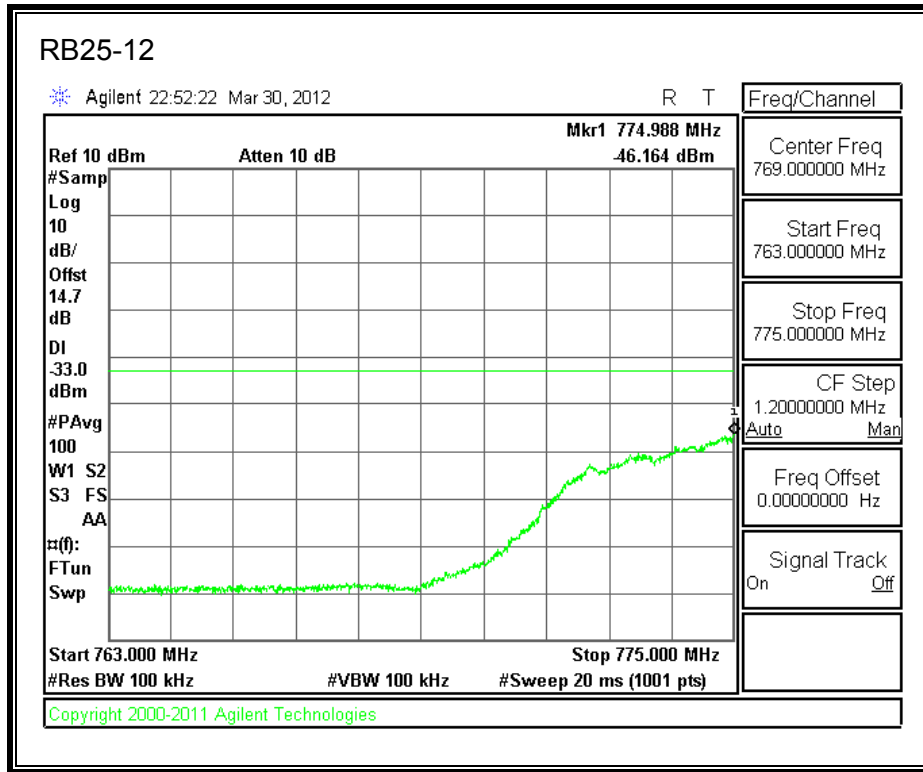




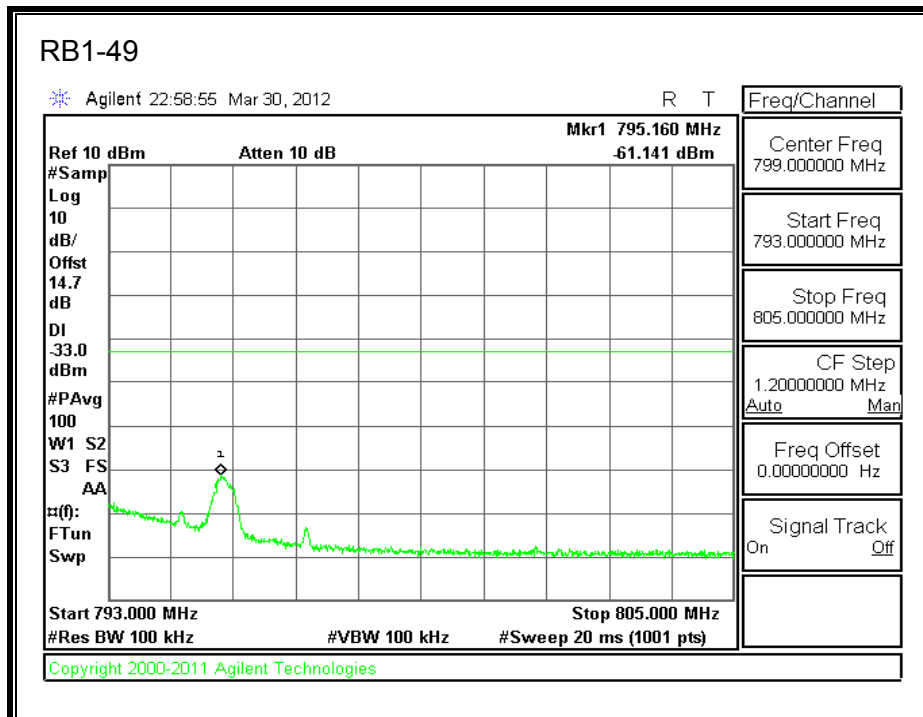
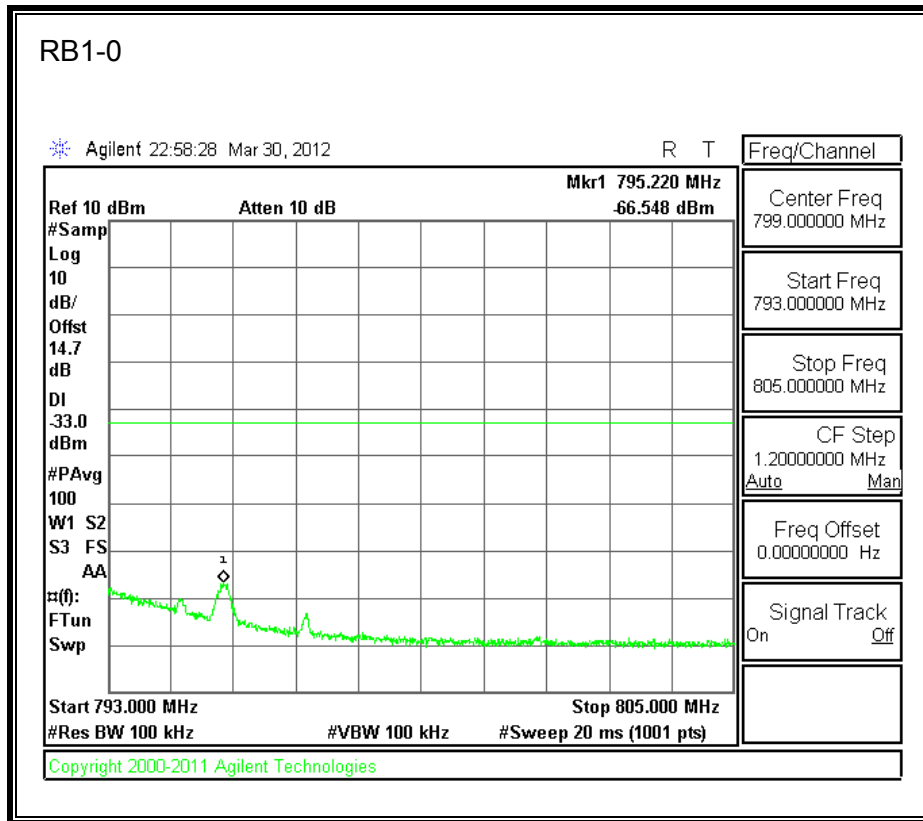


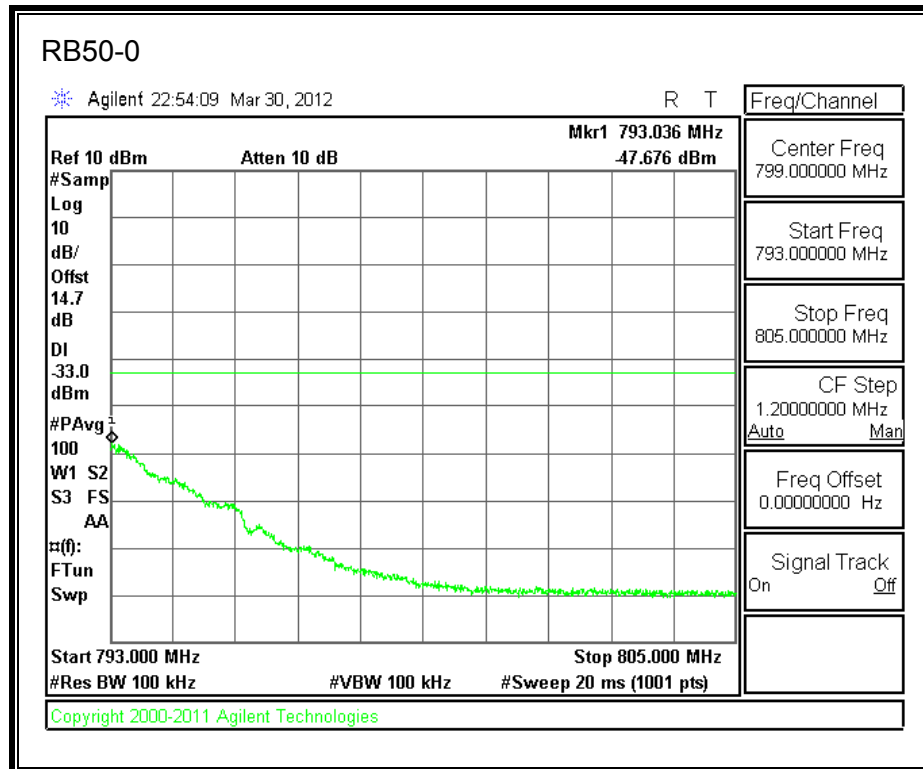
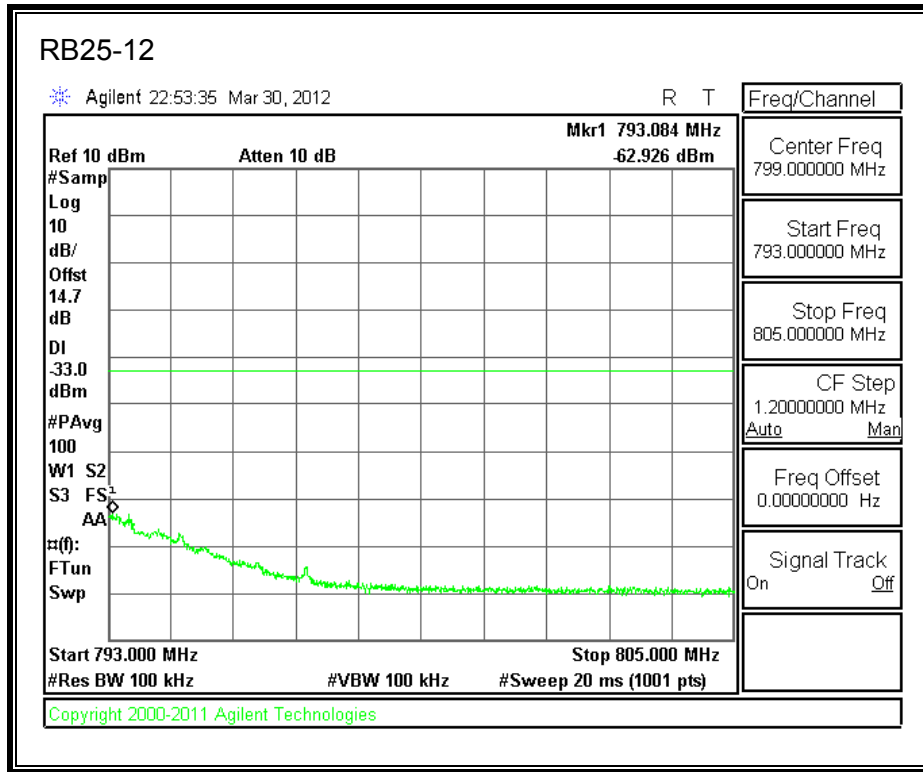
**LTE QPSK 782MHz Band 13, 763 - 775MHz (10MHz Bandwidth)**



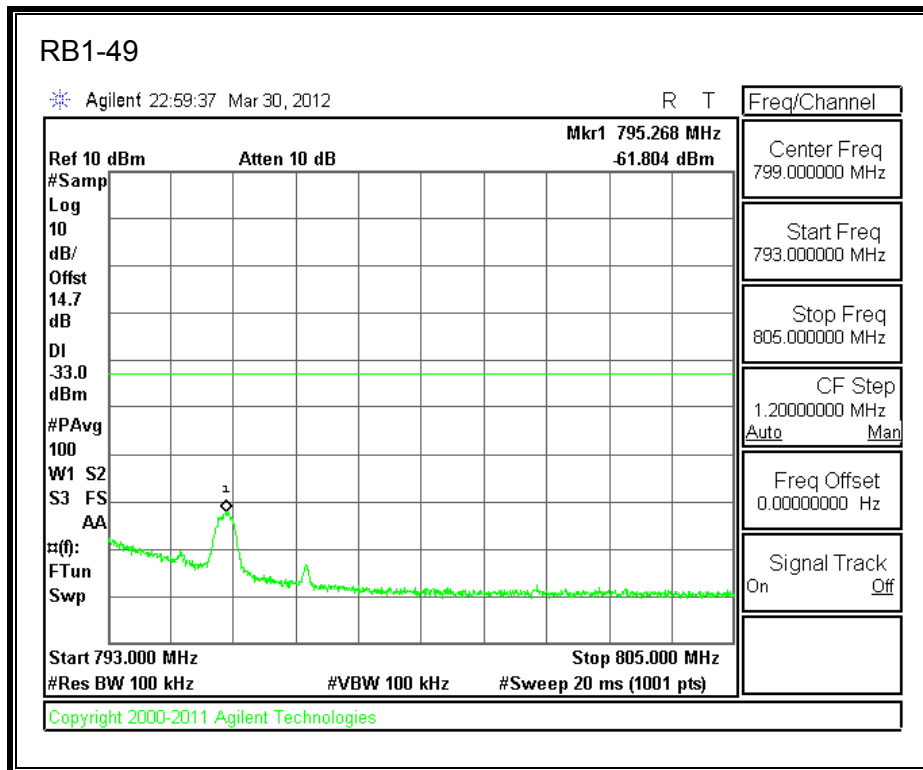
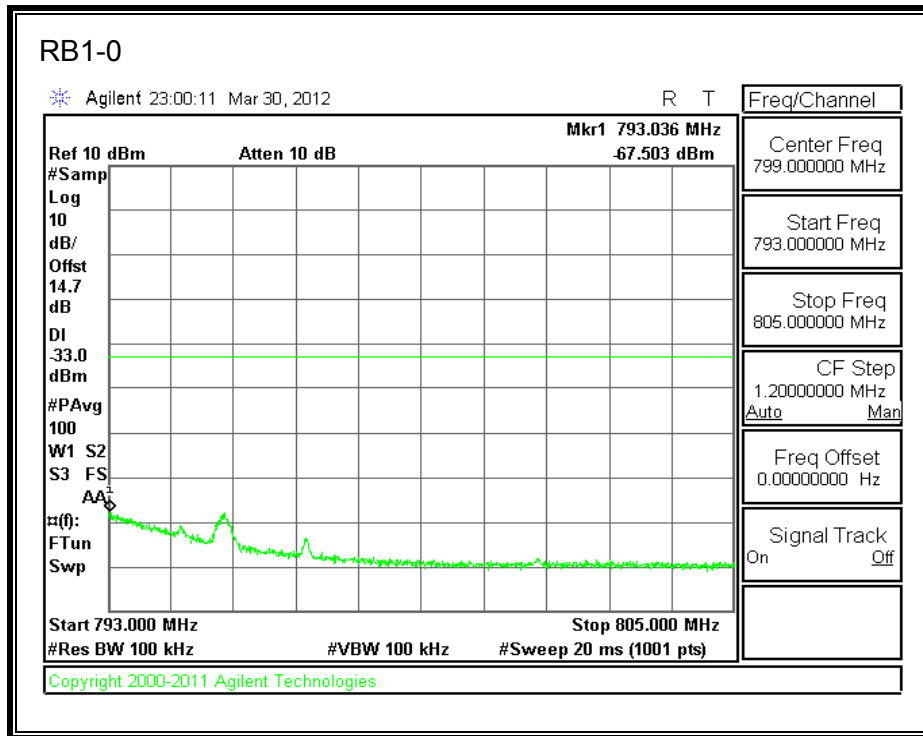


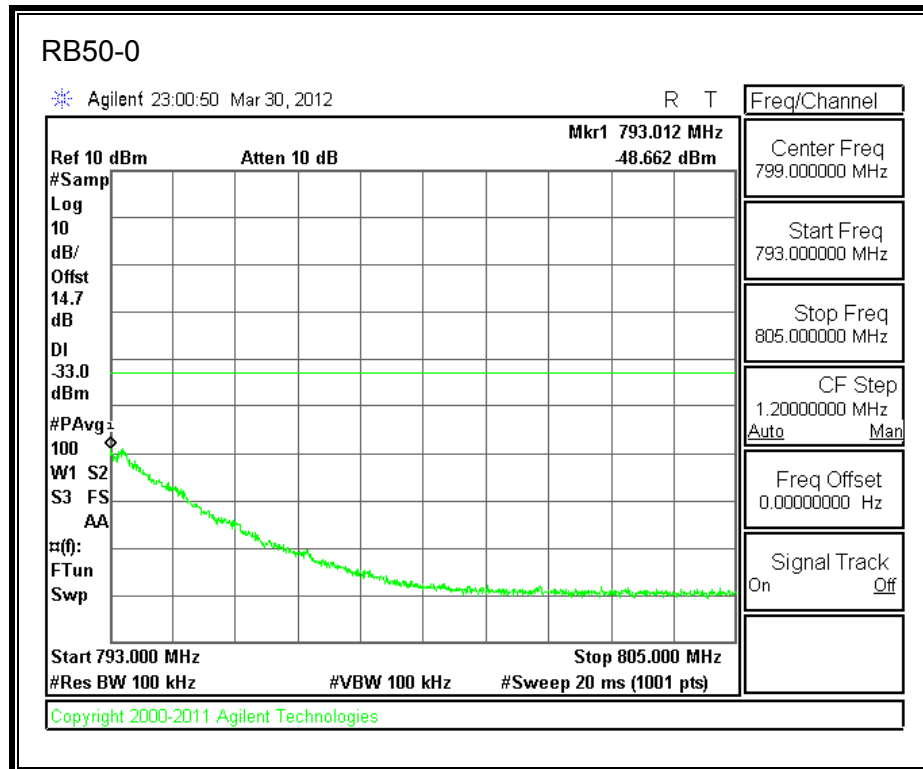
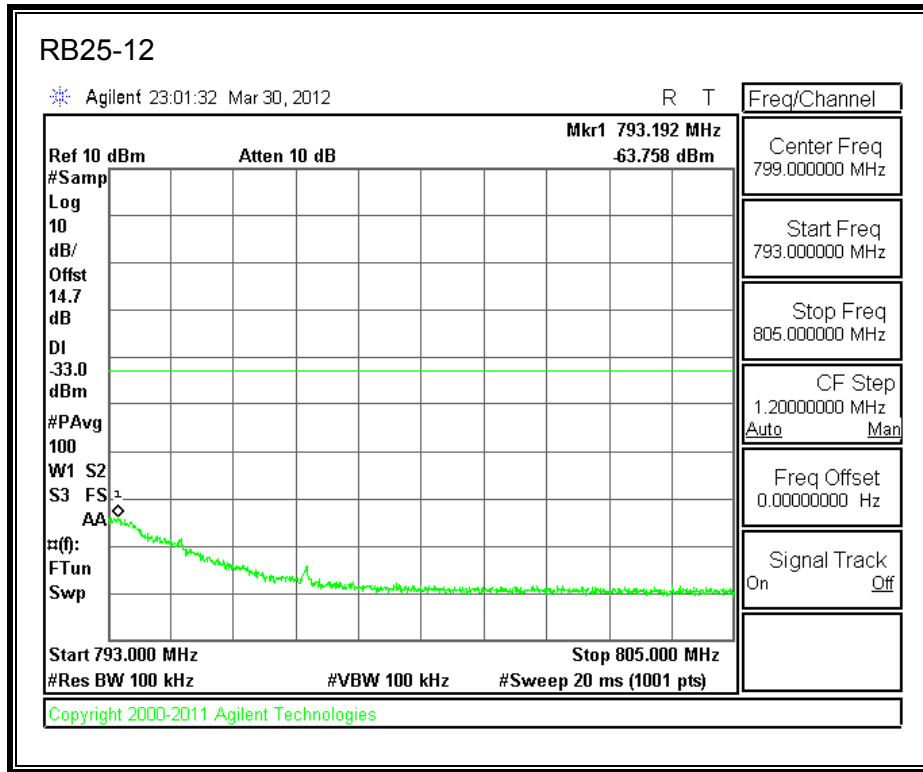
**LTE QPSK Band 13, 793 - 805MHz (10MHz Bandwidth)**





**LTE 16QAM Band 13, 793 - 805MHz (10MHz Bandwidth)**





### **8.3. OUT OF BAND EMISSIONS**

#### **RULE PART(S)**

FCC: §2.1051, §22.901, §22.917, §24.238 and §27.53

#### **LIMITS**

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**

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

- Set display line at -13 dBm
- Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.

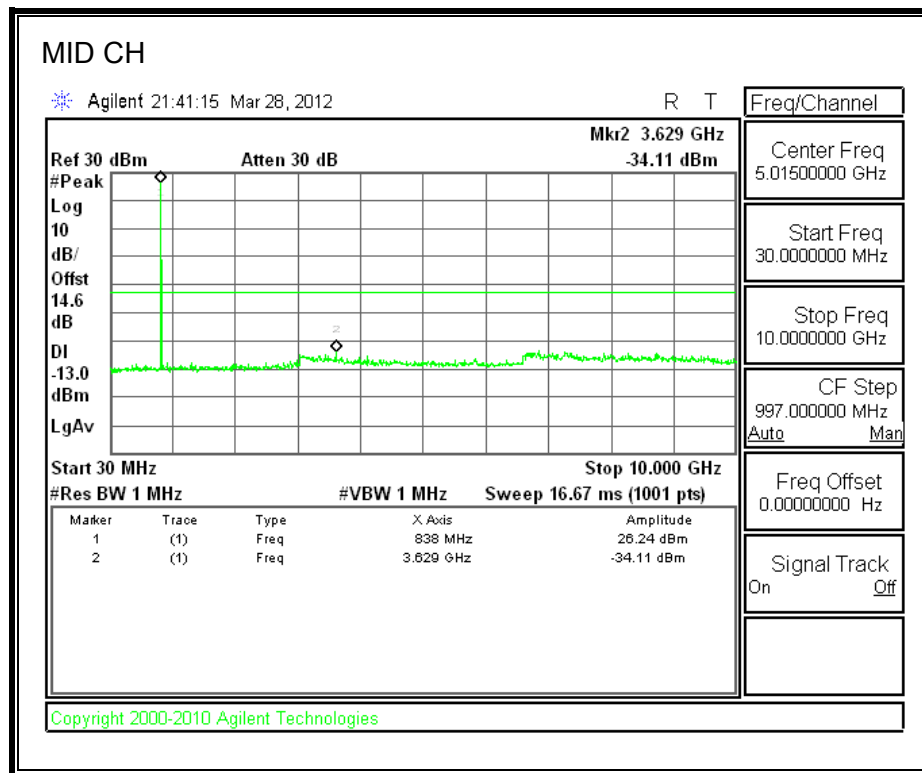
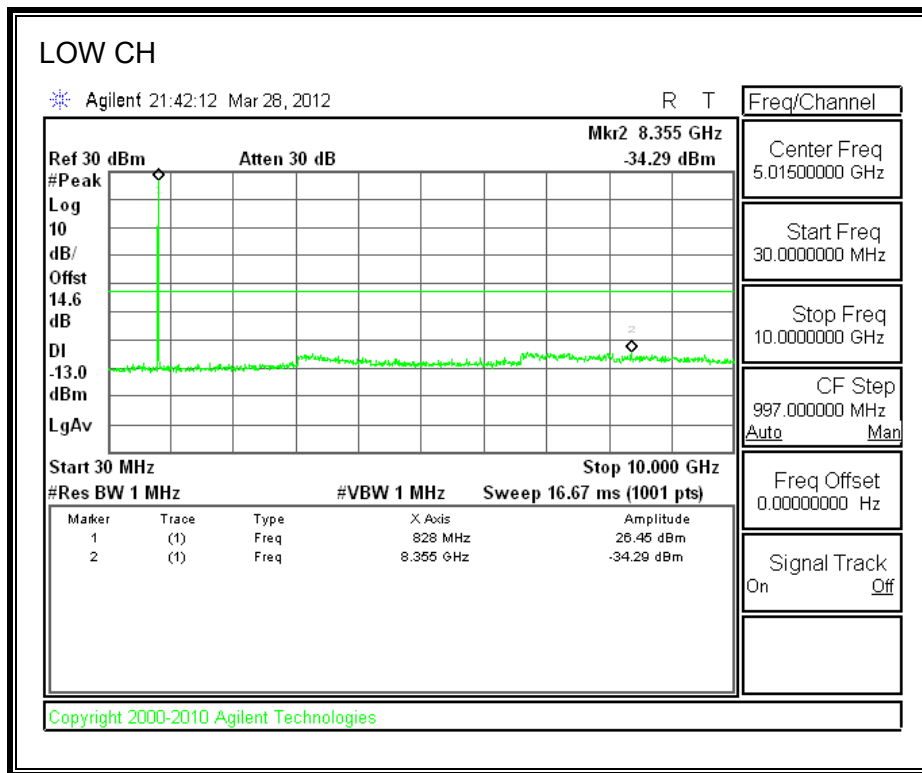
#### **MODES TESTED**

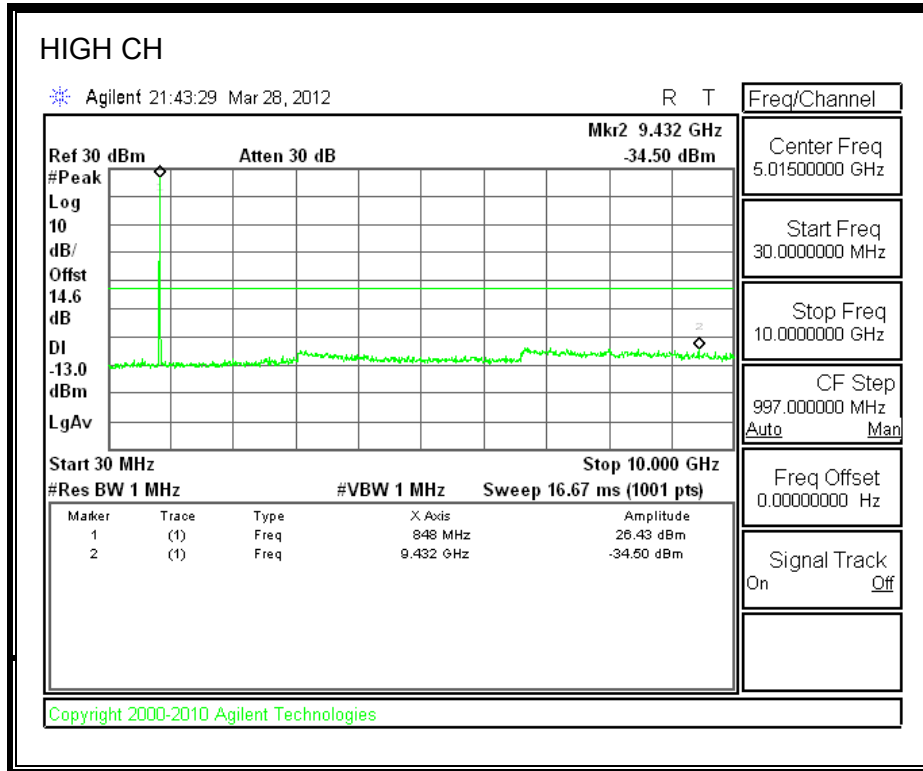
- 1xRTT – RC2, SO9
- CDMA2000 1xEV-DO Revision A (Rev. A)
- GPRS and EGPRS
- UMTS, REL 99 and HSDPA
- LTE Band 13

#### **RESULTS**

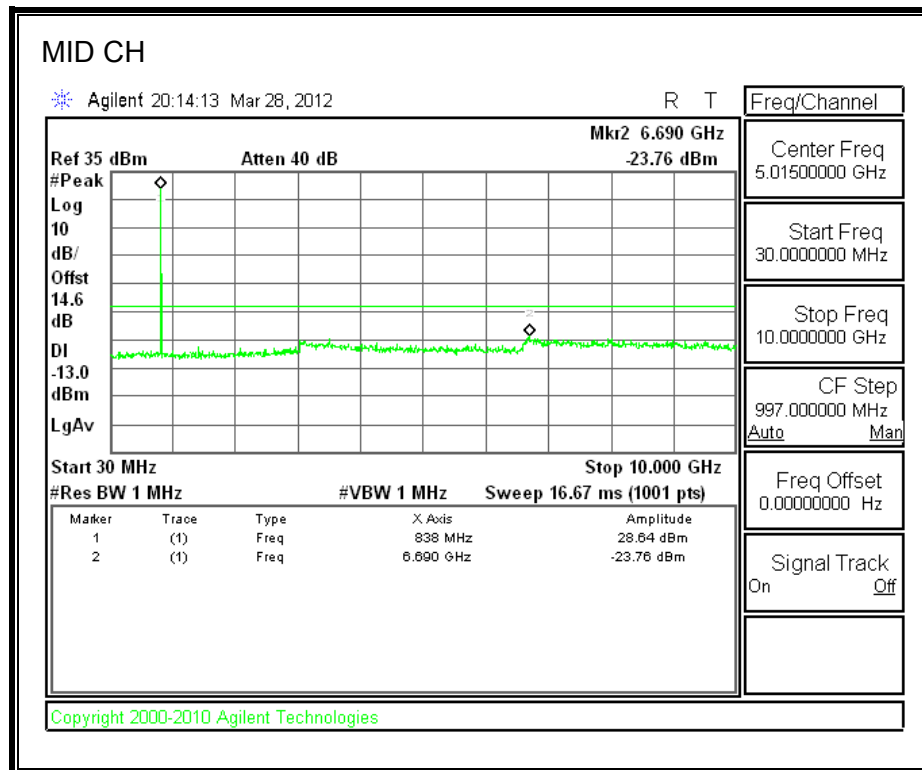
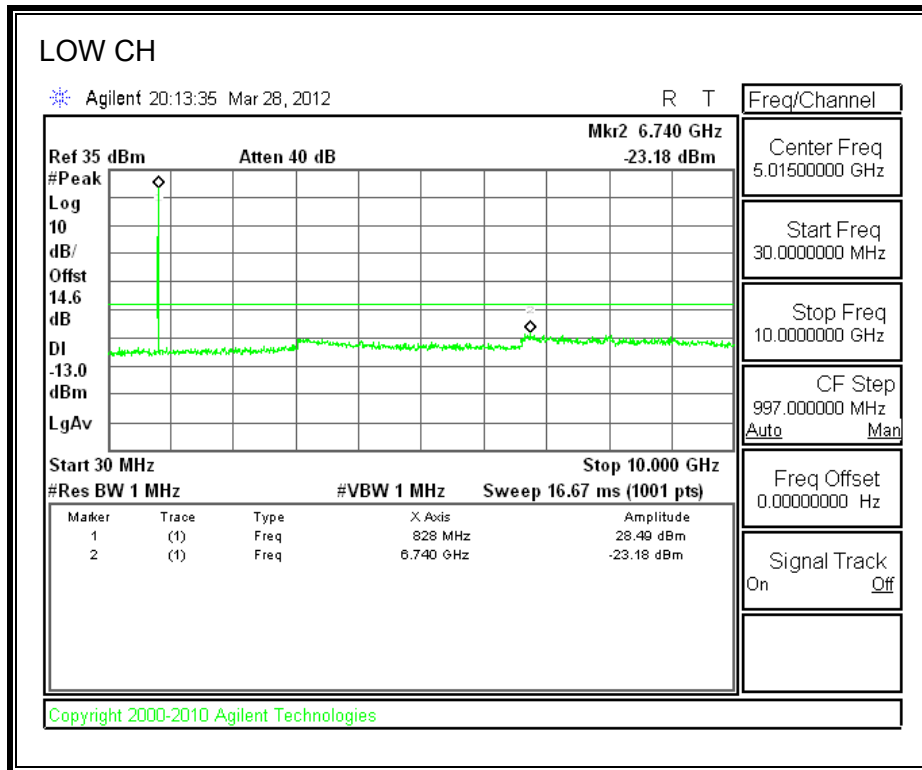


**1xRTT Mode (Cellular Band)**



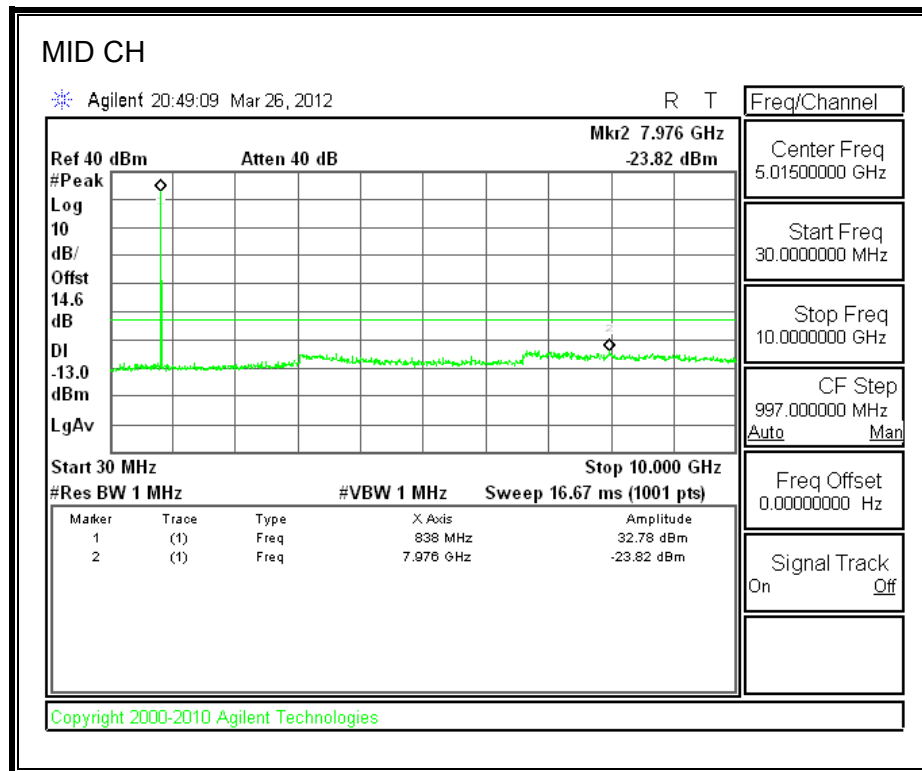
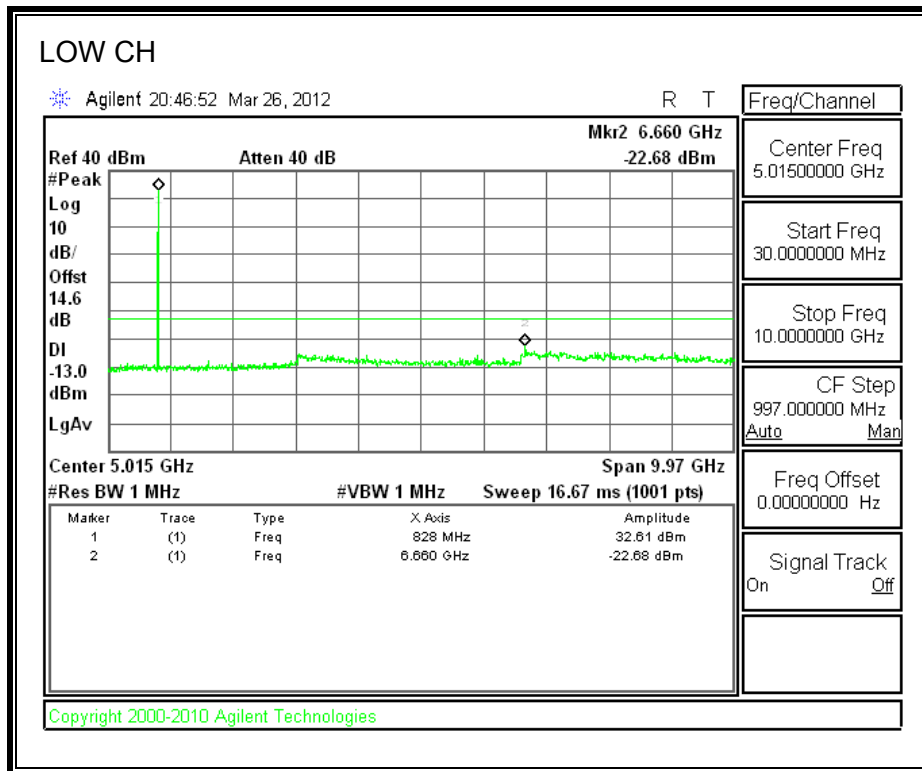


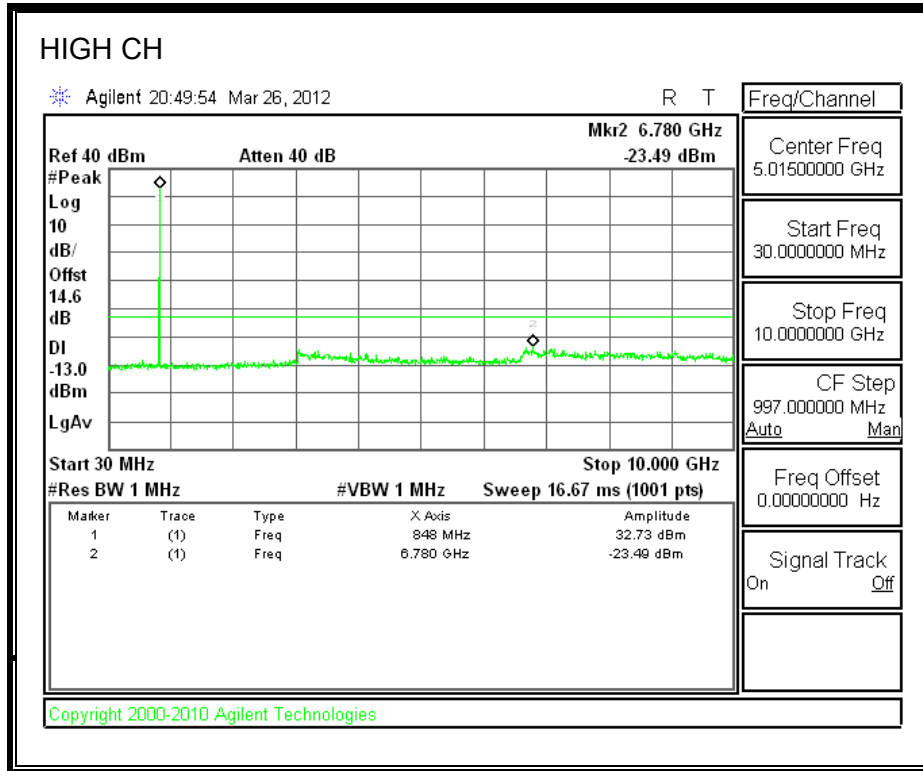
**CDMA2000 1xEV-DO Revision A (Rev. A) Mode (Cellular Band)**



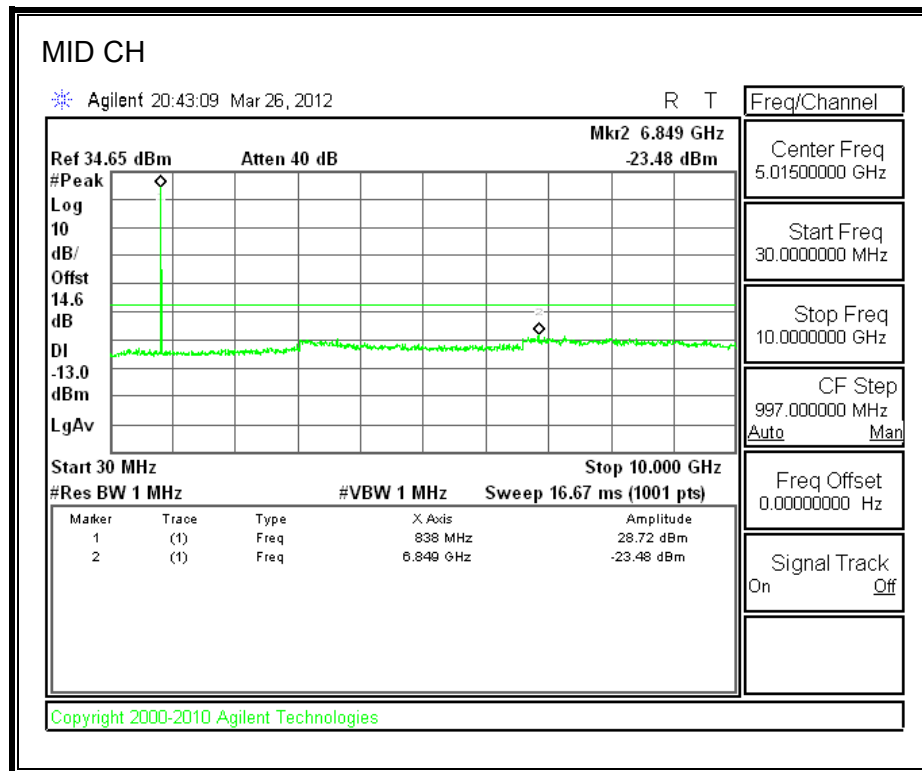
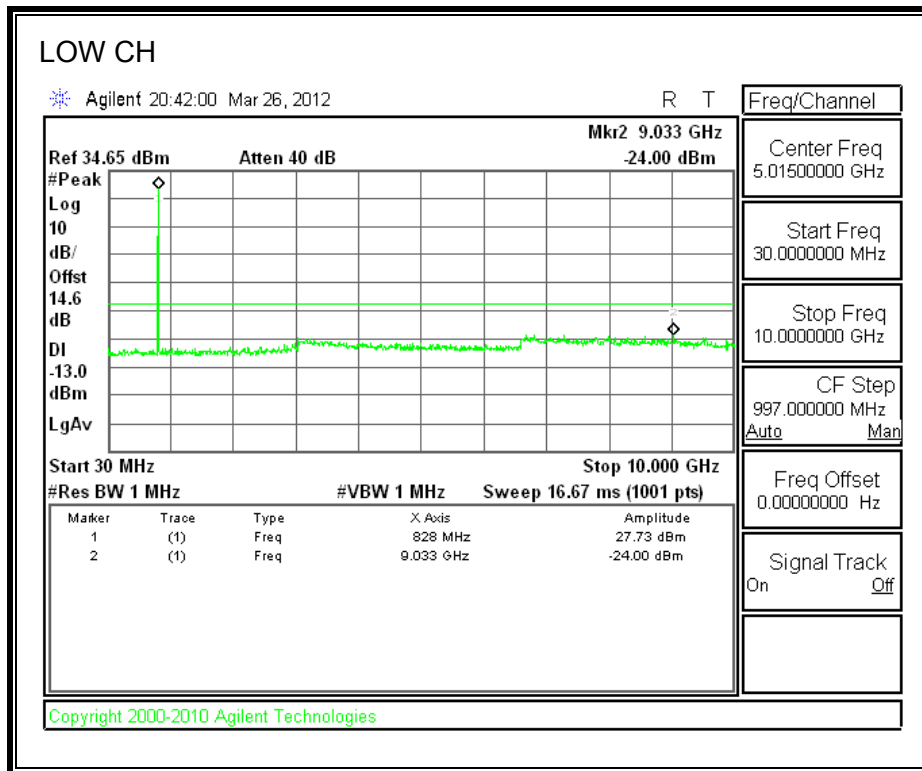


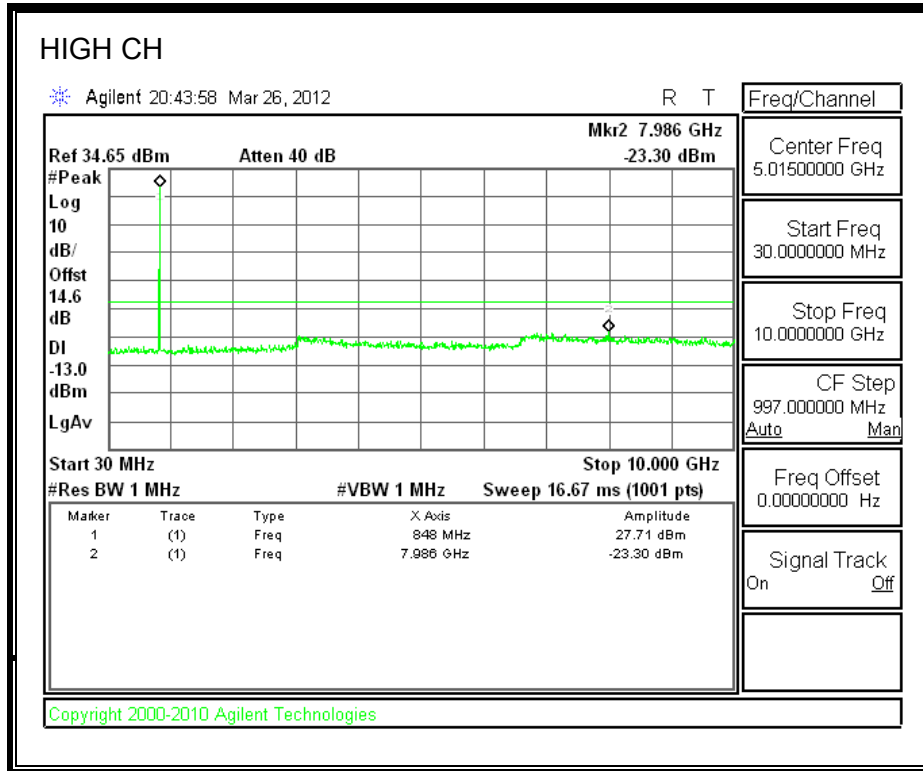
**GPRS Mode (Cellular Band)**





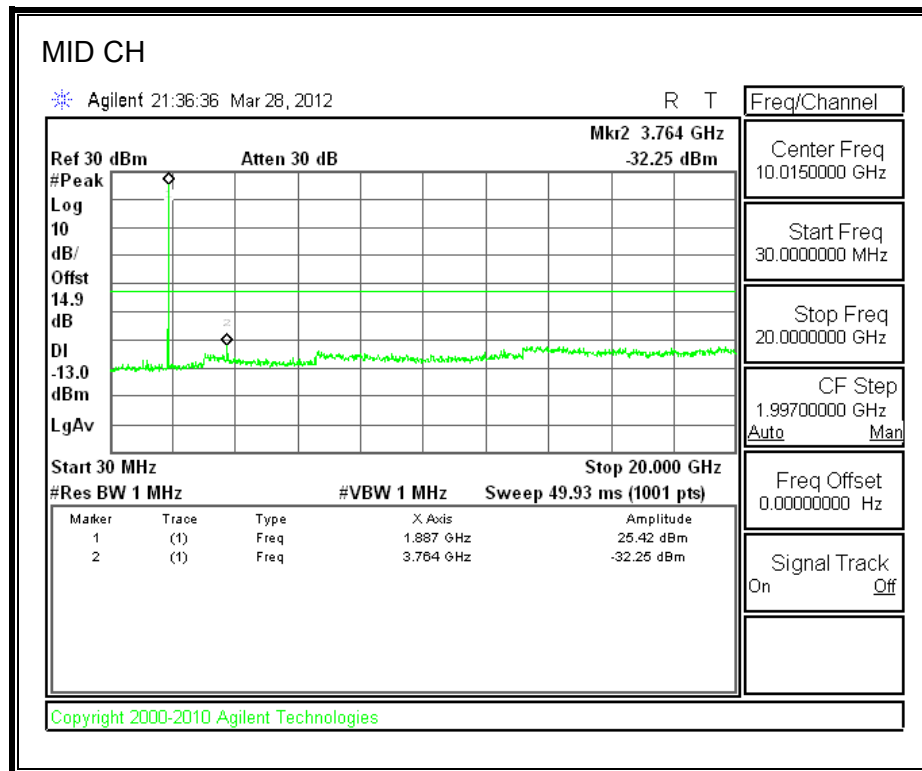
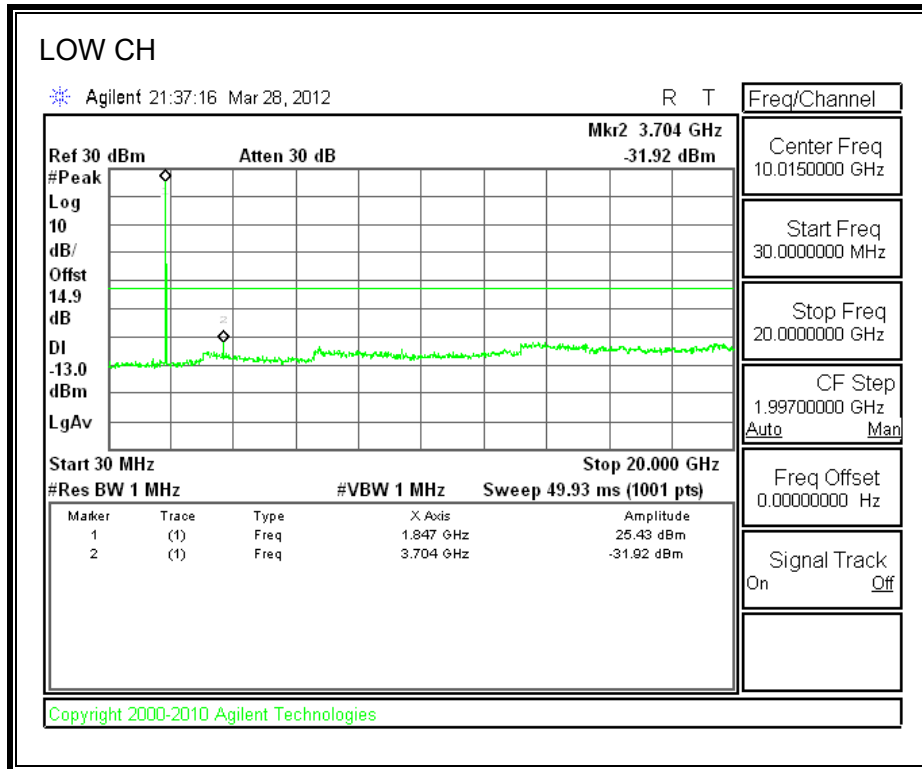
**EGPRS Mode (Cellular Band)**

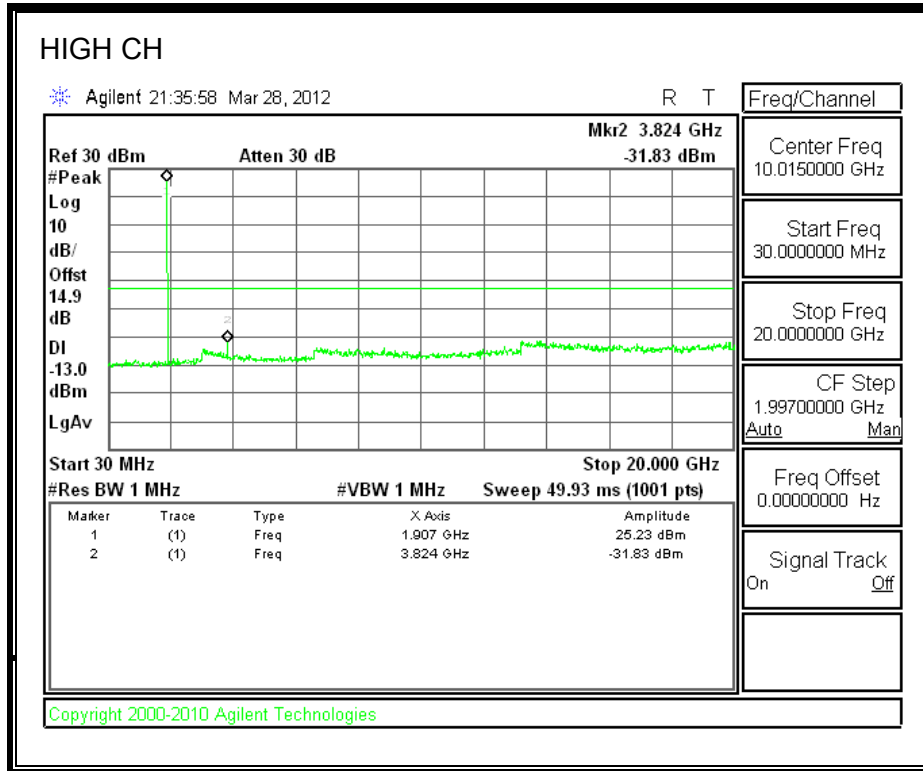




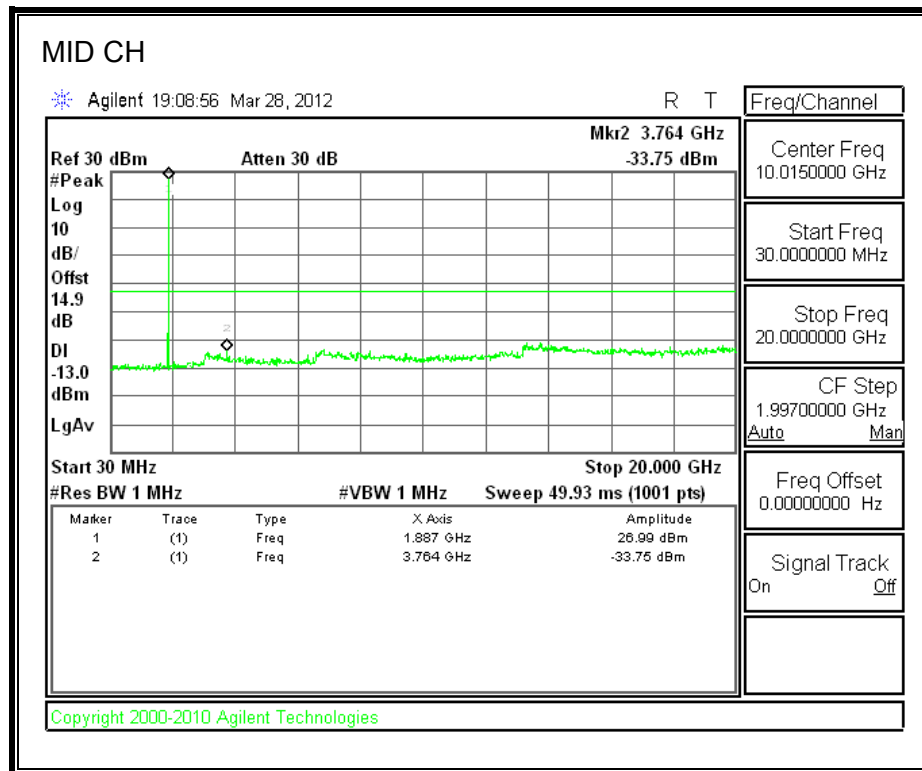
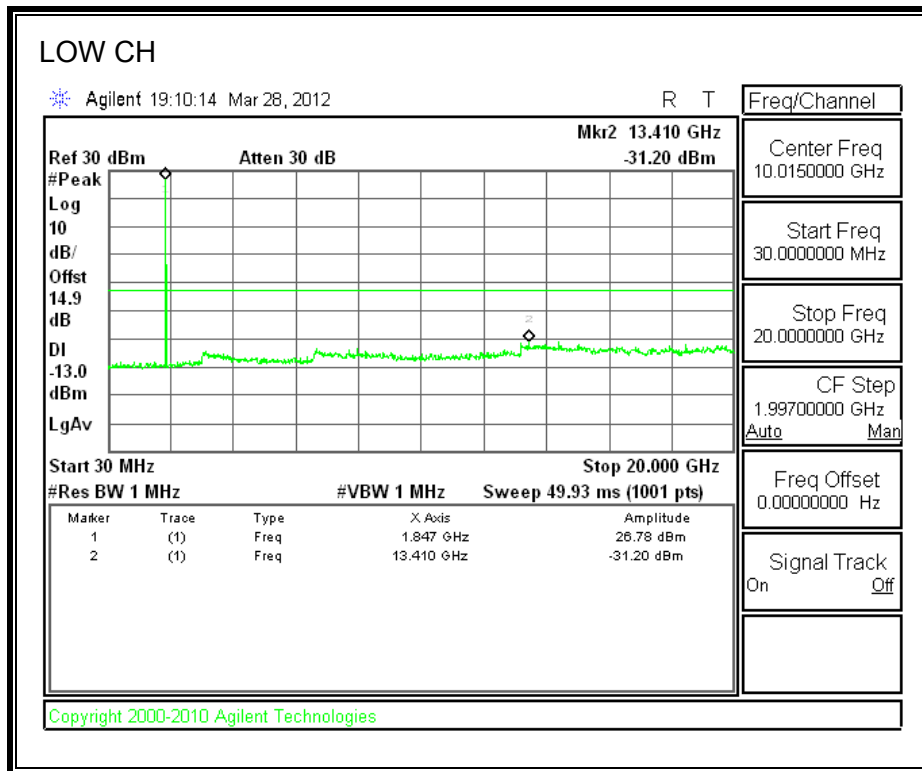


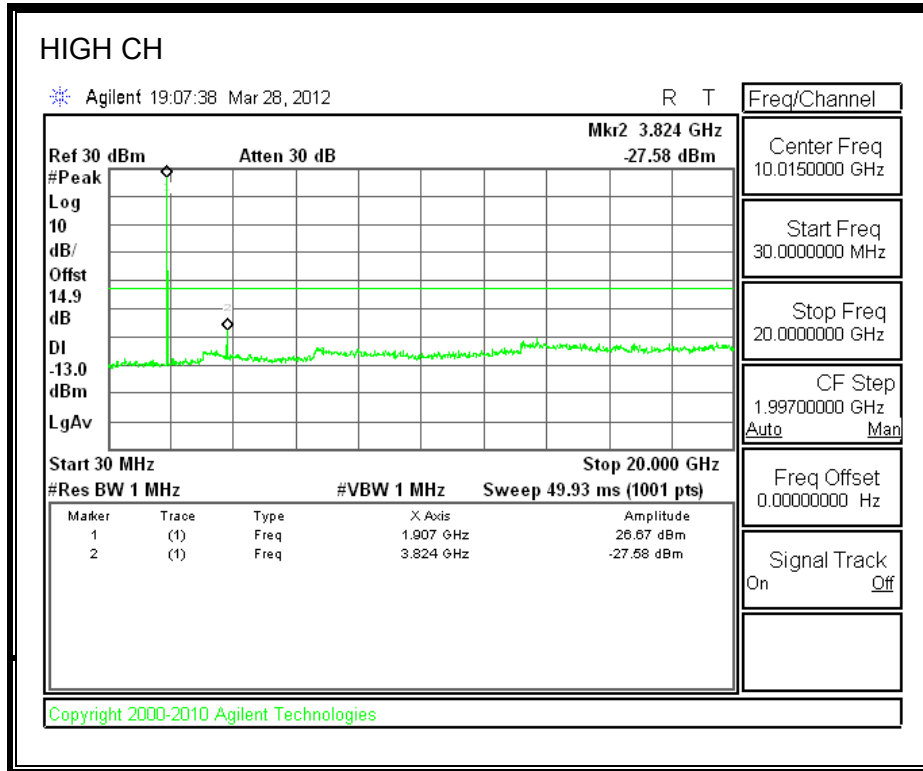
**1xRTT Mode (PCS Band)**



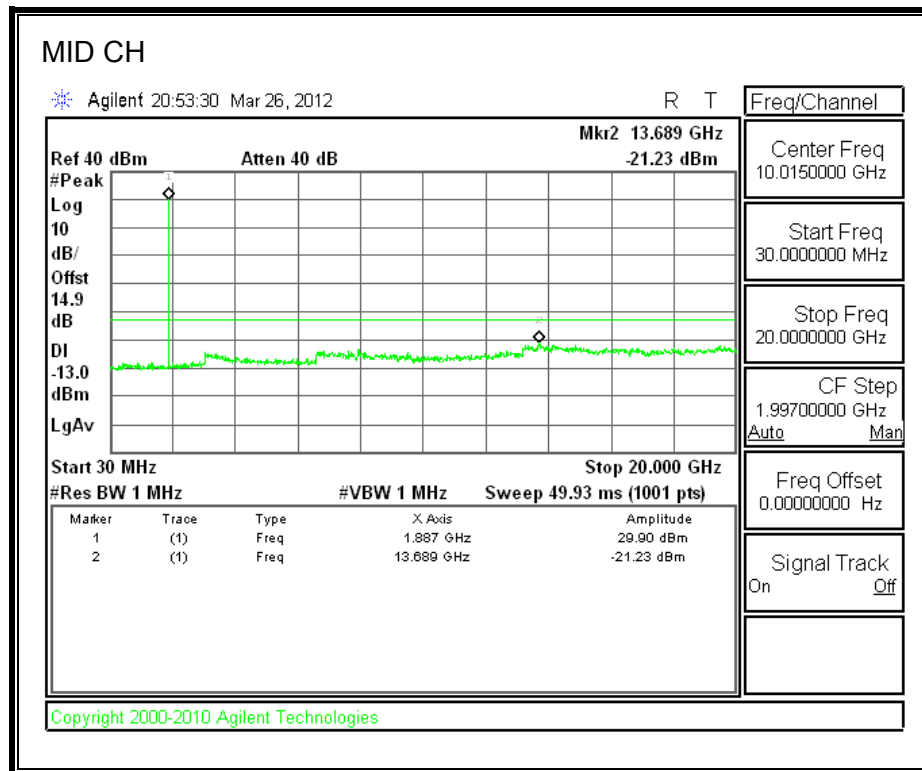
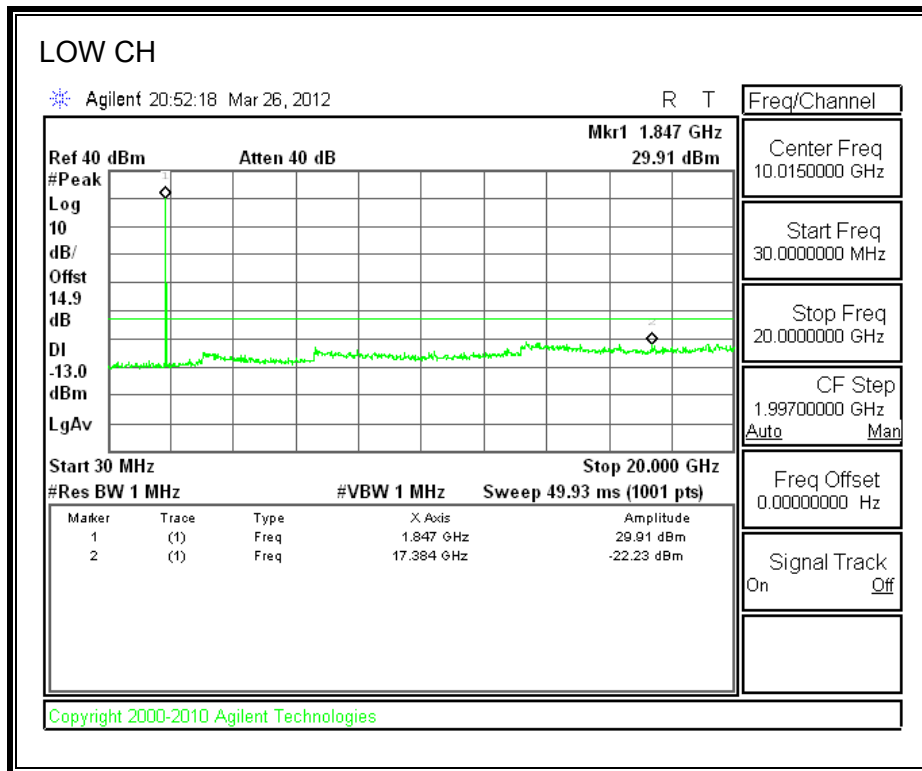


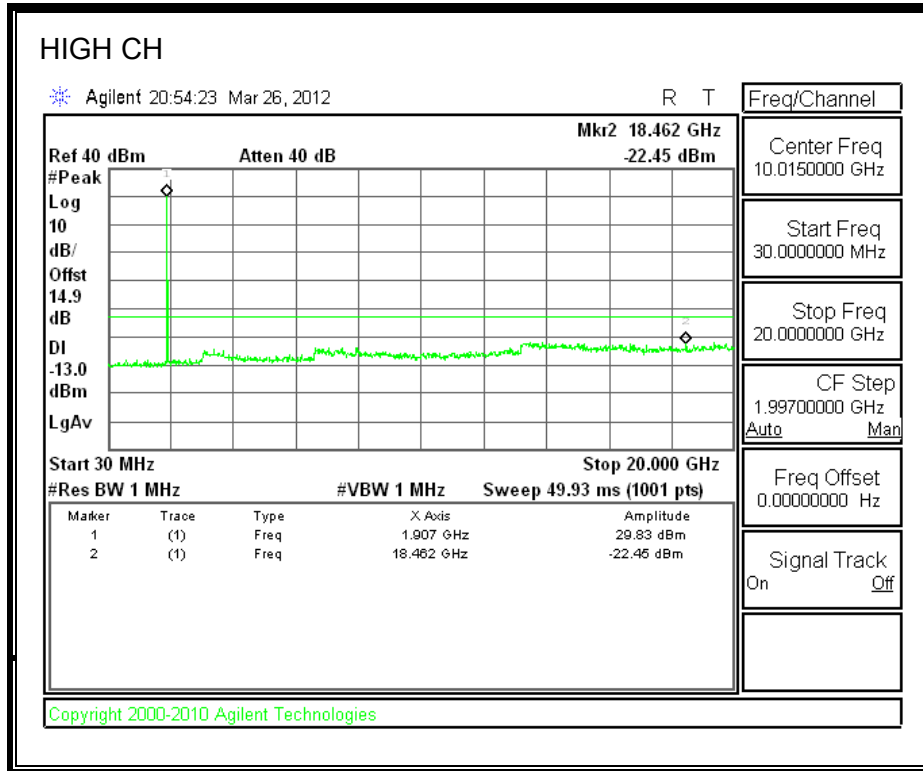
**CDMA2000 1xEV-DO Revision A (Rev. A) Mode (PCS Band)**



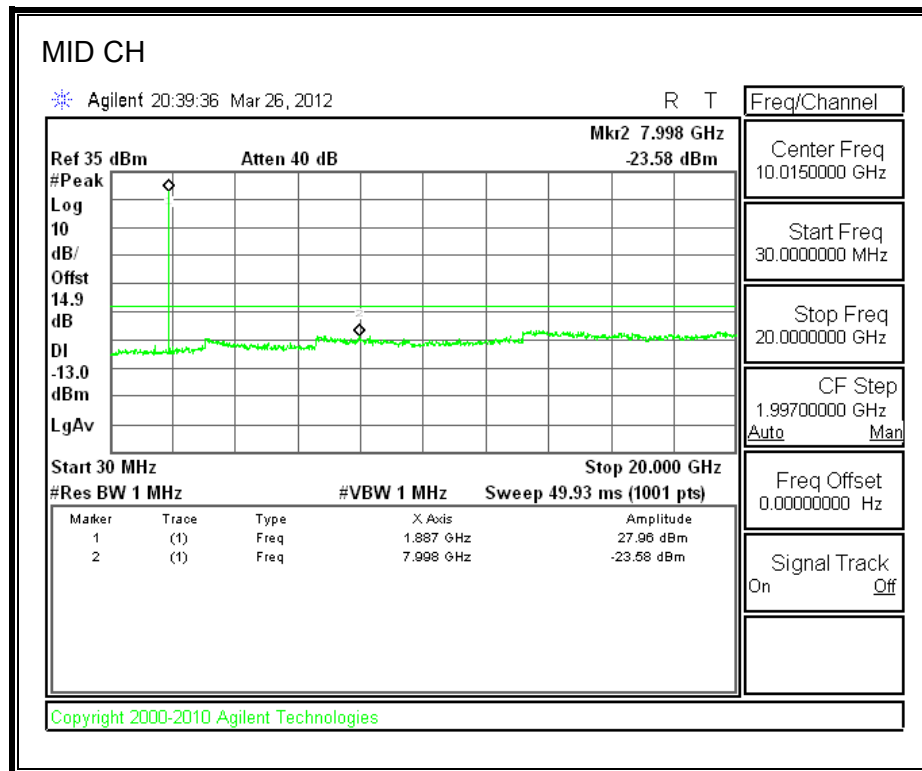
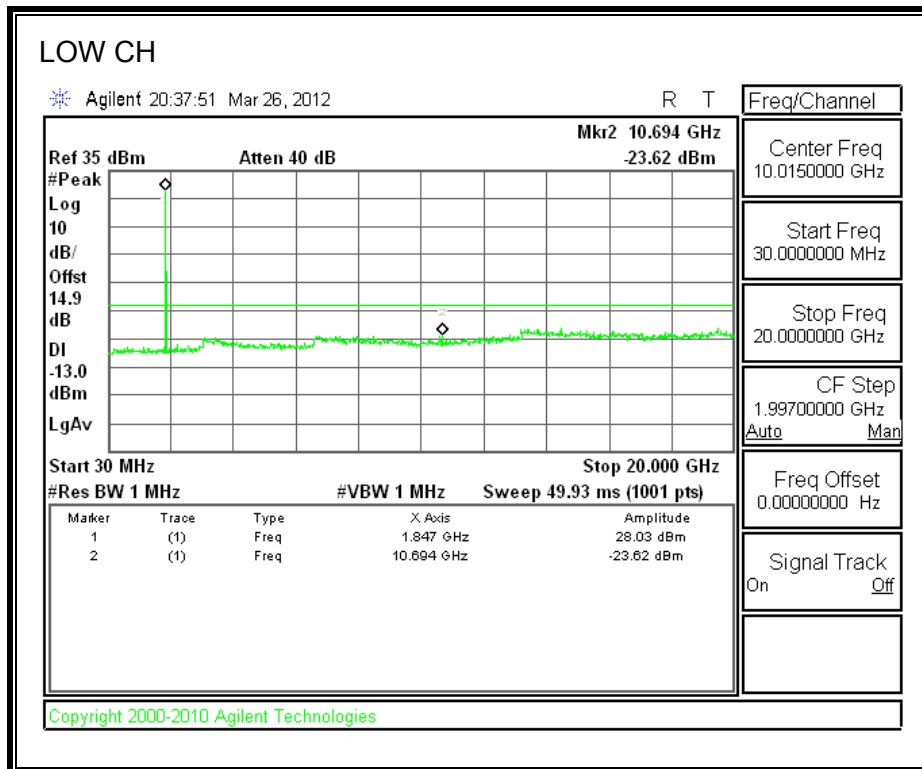


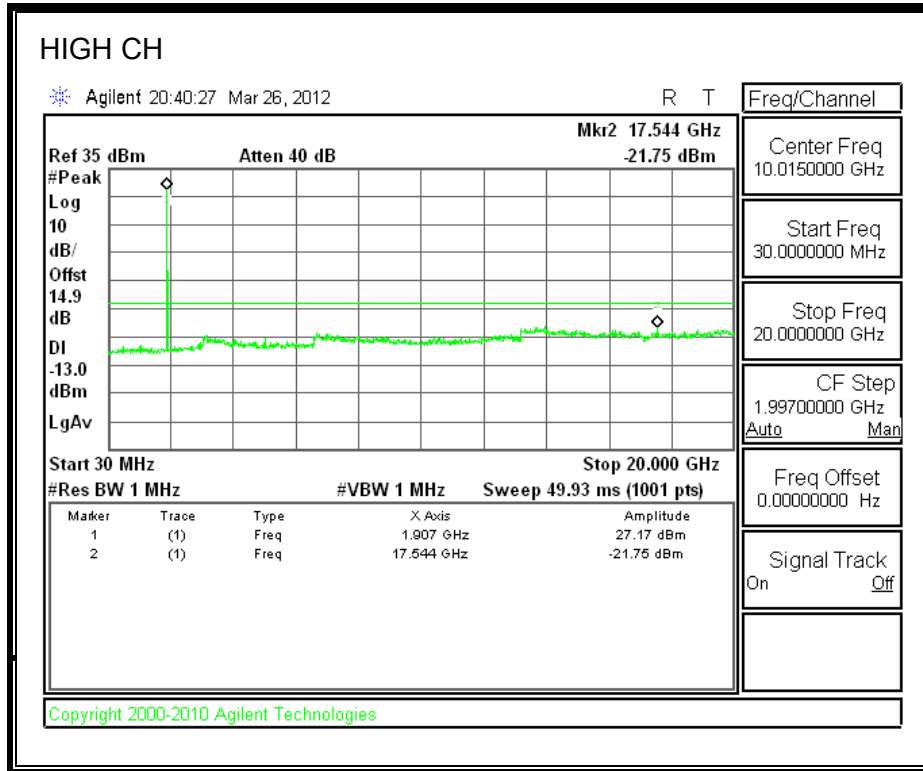
**GPRS Mode (PCS Band)**





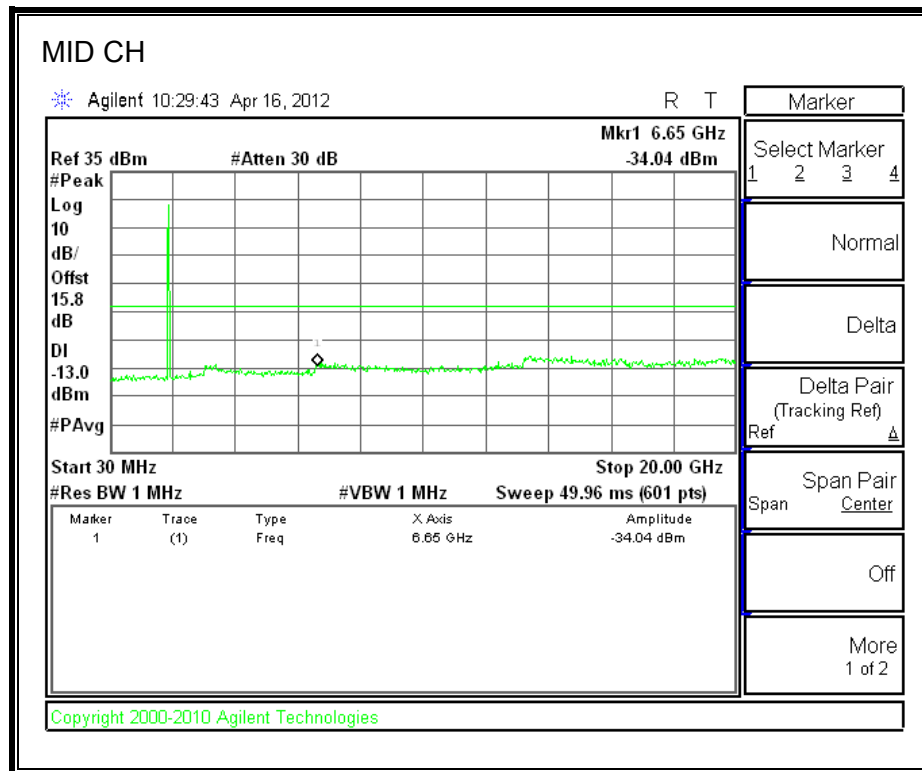
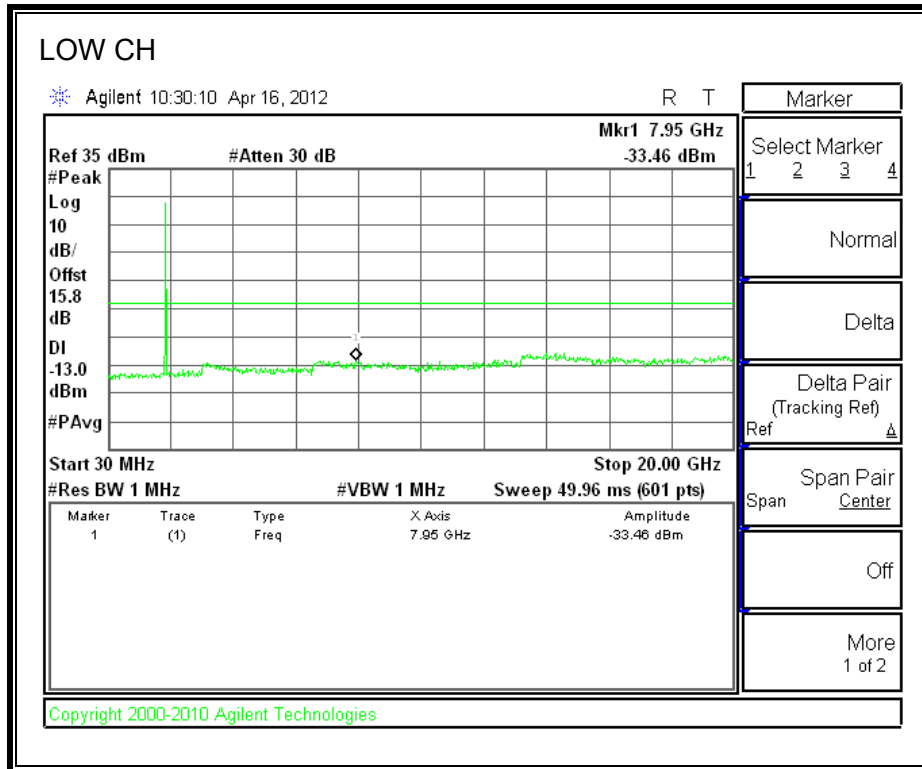
**EGPRS Mode (PCS Band)**

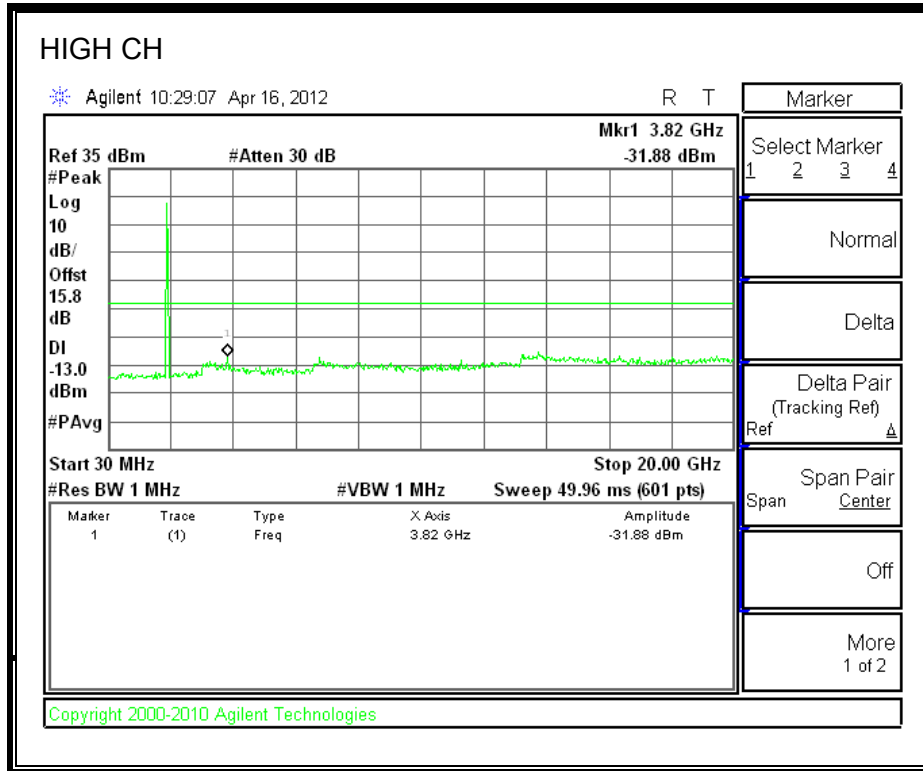




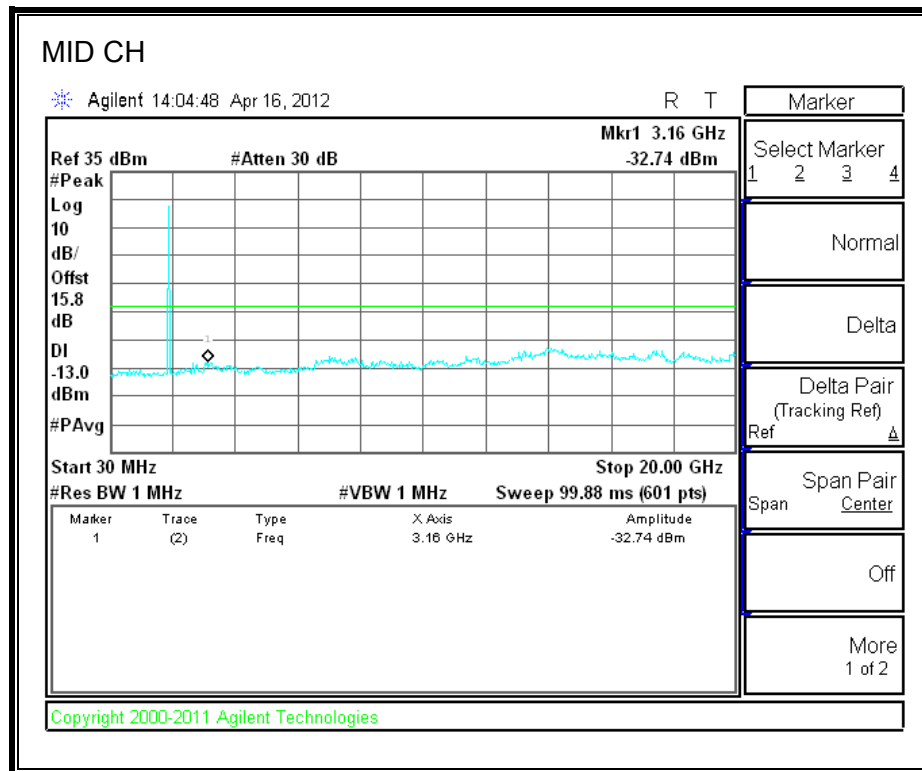
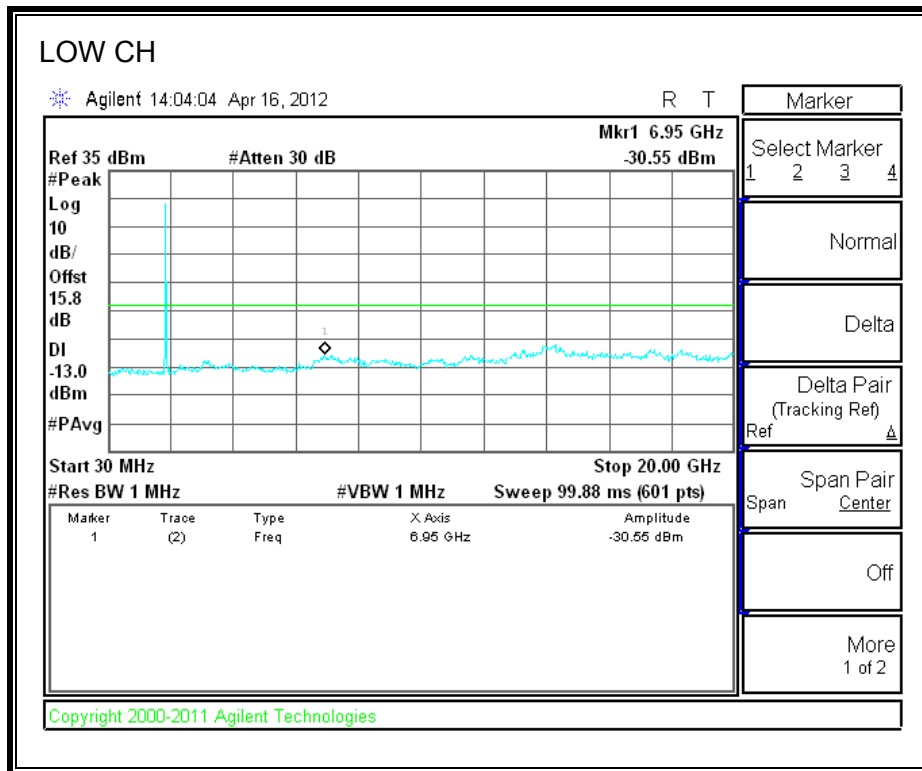


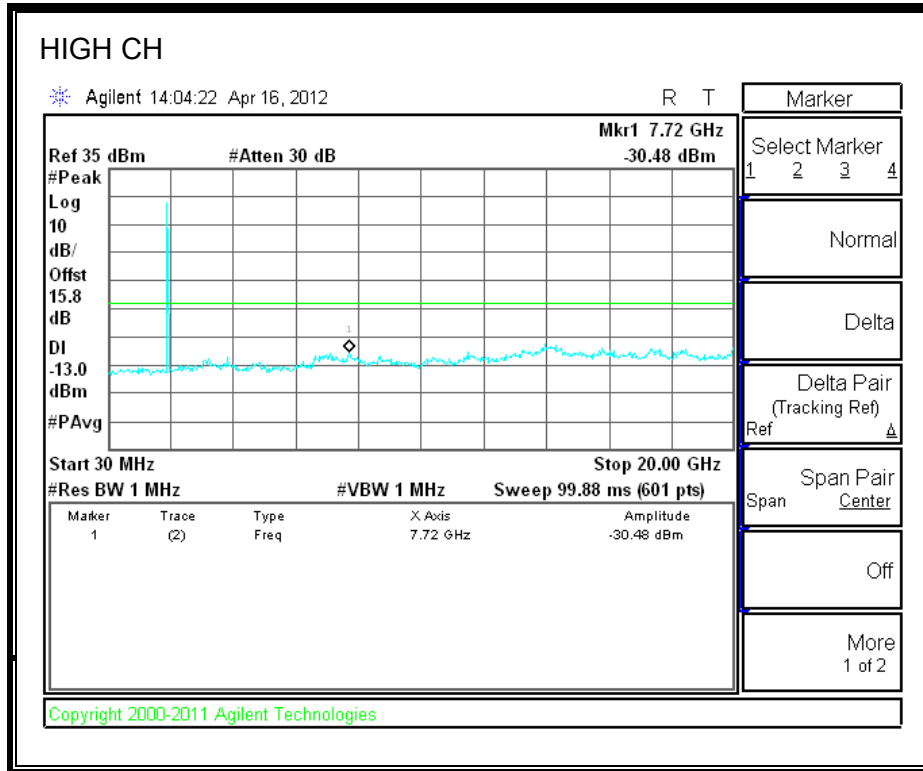
**UMTS REL 99 (PCS Band)**



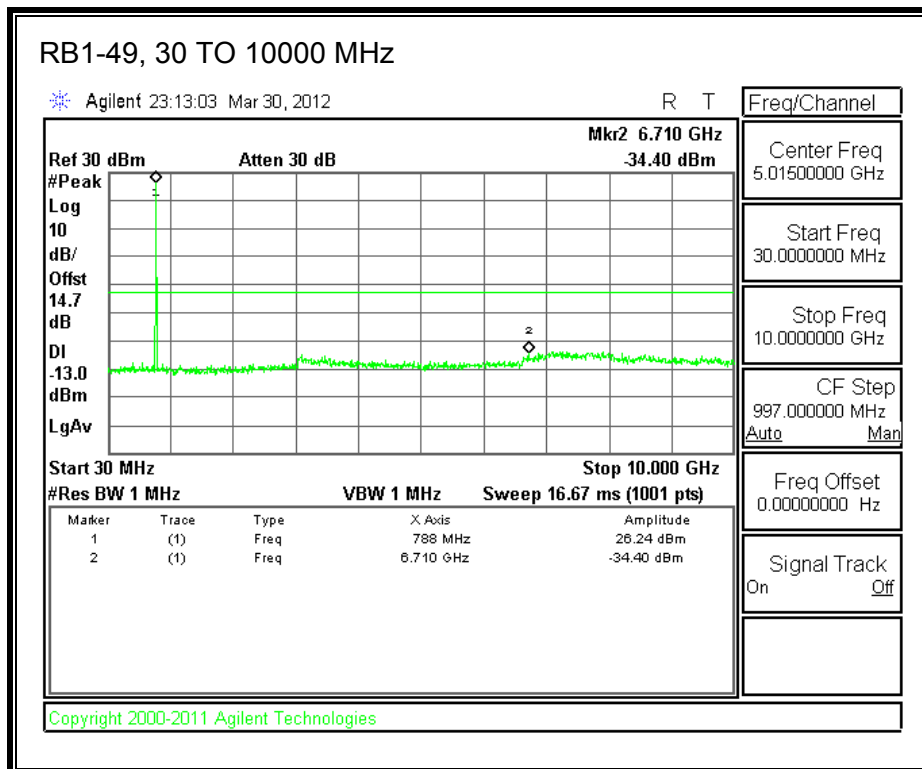
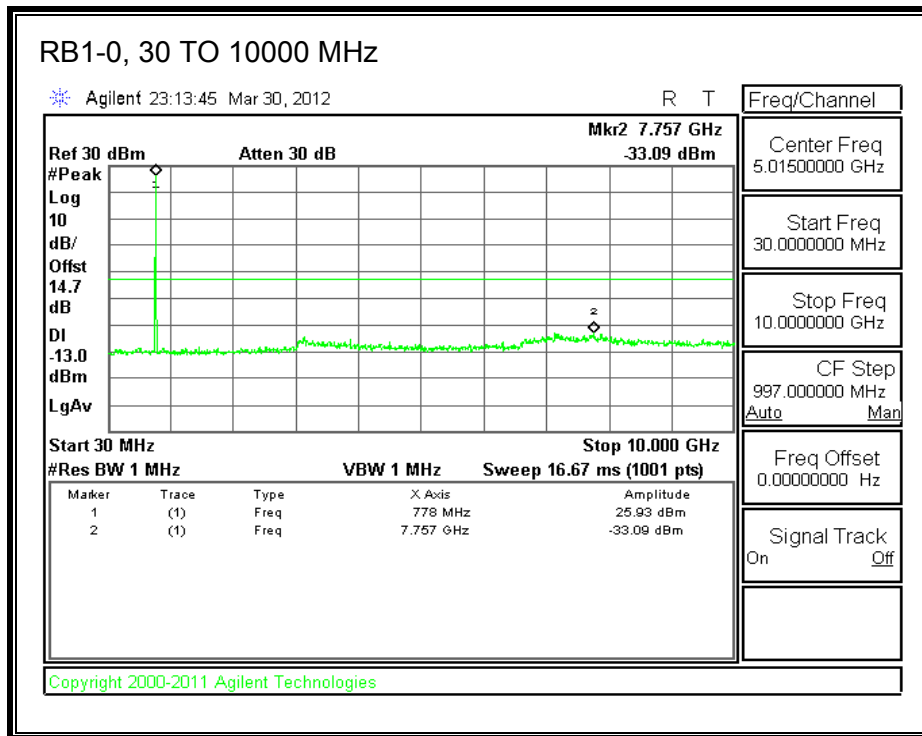


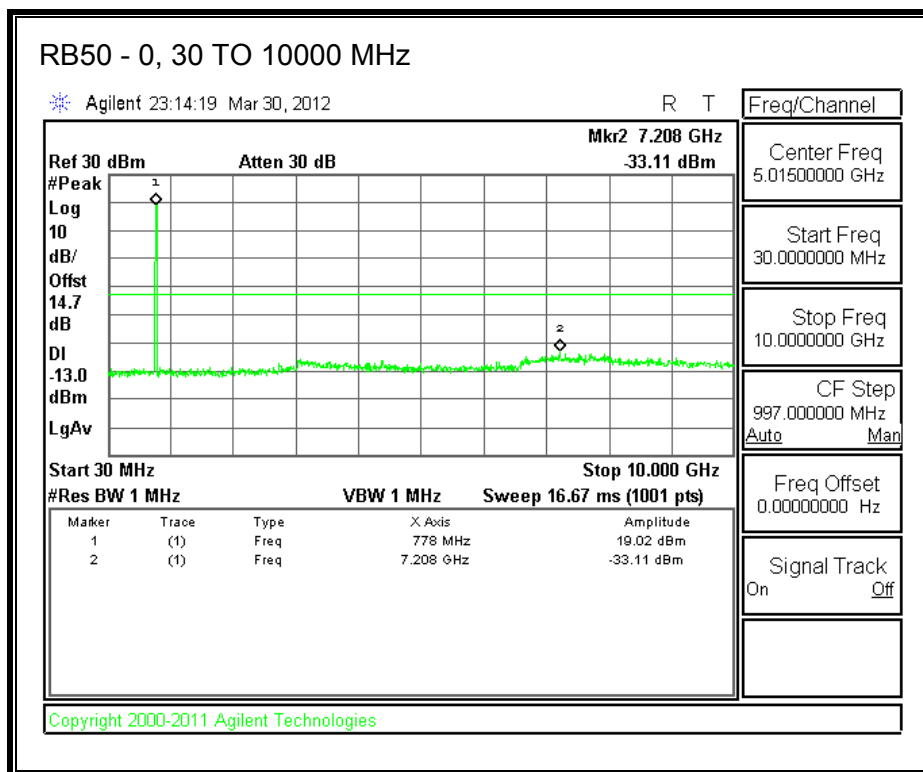
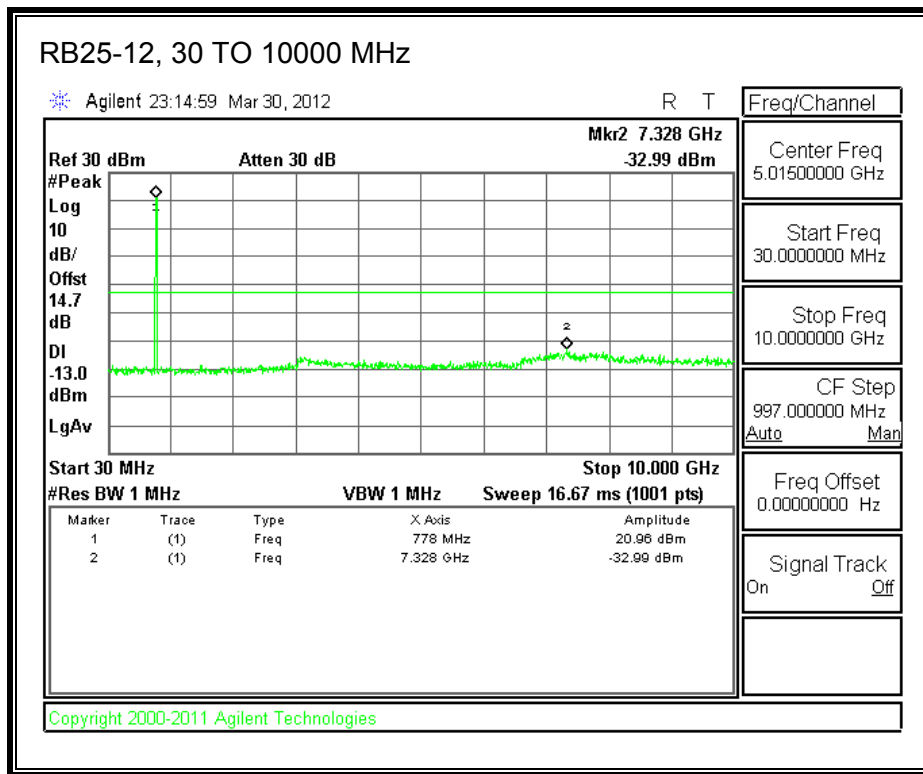
**UMTS HSDPA (PCS Band)**



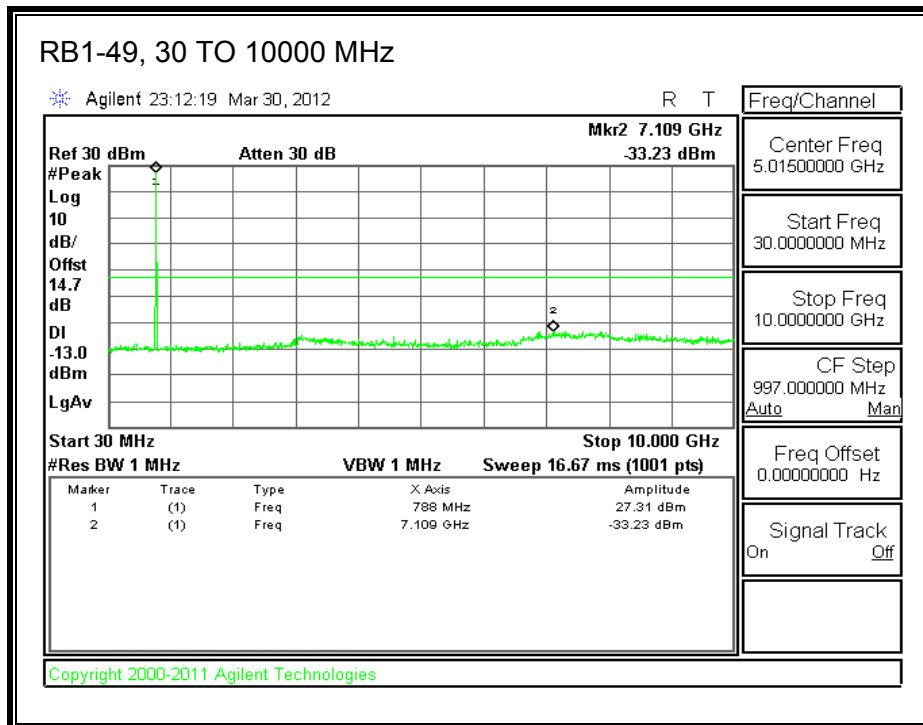
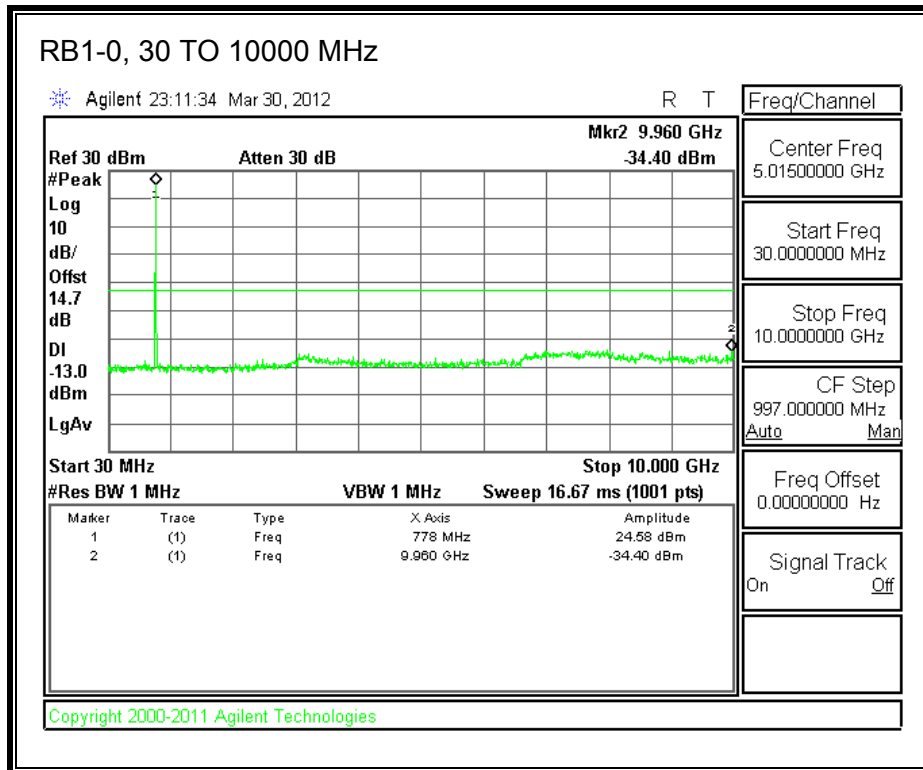


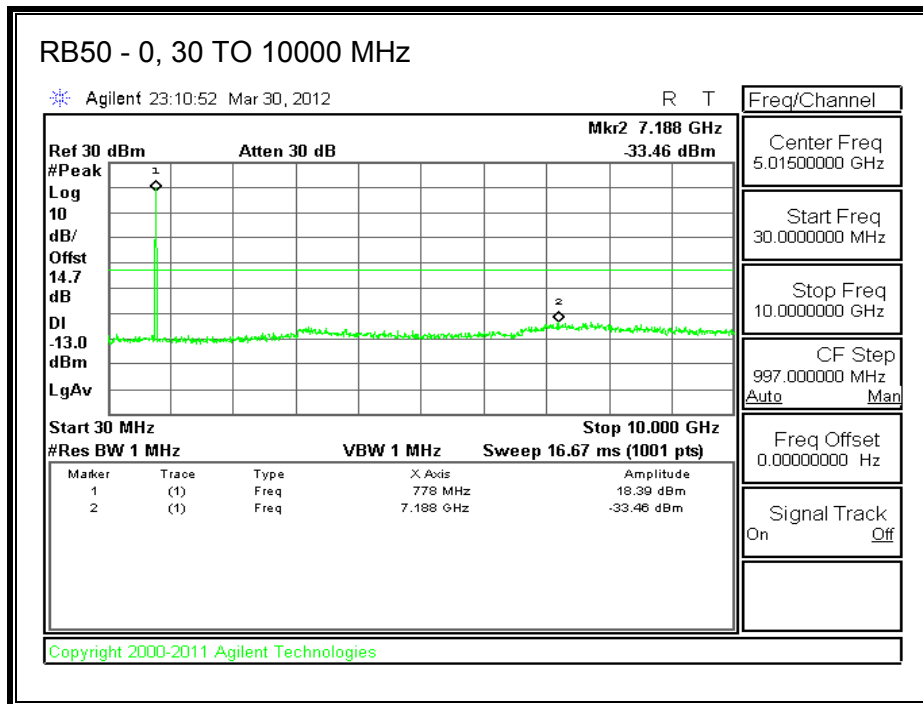
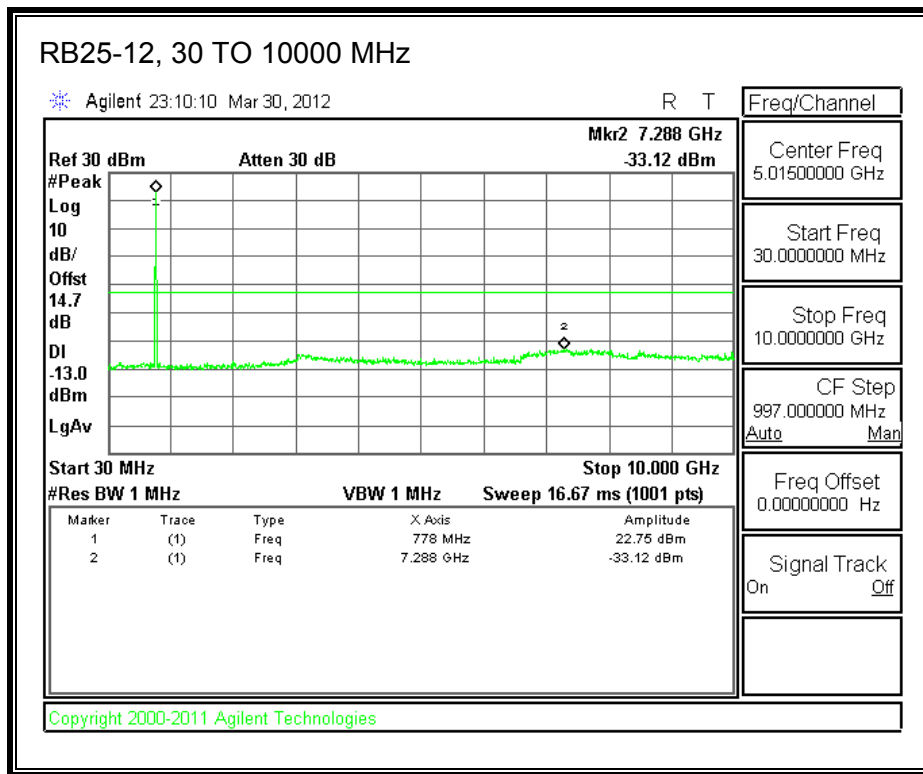
**LTE QPSK Band 13**





**LTE 16QAM Band 13**







## 8.4. FREQUENCY STABILITY

### RULE PART(S)

FCC: §2.1055, §22.355, §24.235 and §27C

### LIMITS

- §22.355 - The carrier frequency shall not depart from the reference frequency in excess of  $\pm 2.5$  ppm for mobile stations.
- §24.235 - The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.
- § 27.54 - The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation

### TEST PROCEDURE

Use Agilent 8960 with Frequency Error measurement capability.

- Temp. =  $-30^{\circ}$  to  $+50^{\circ}\text{C}$
- Voltage = 3.80 Vdc (85% - 115%)
- 

#### **Frequency Stability vs Temperature:**

The EUT is placed inside a temperature chamber. The temperature is set to  $20^{\circ}\text{C}$  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).

### MODES TESTED

- CDMA2000 1xEV-DO Revision A (Rev. A)
- GPRS, EGPRS
- UMTS, HSDPA
- LTE Band 13

### RESULTS

See the following pages.

**CELL CDMA2000 1xRTT- MID CHANNEL**

Reference Frequency: Cellular Mid Channel 836.519998MHz @ 20°C				
Limit: to stay +/- 2.5 ppm = 2091.300 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	836.519998	0.000	2.5
3.80	40	836.519998	0.000	2.5
3.80	30	836.519998	0.000	2.5
<b>3.80</b>	<b>20</b>	<b>836.519998</b>	<b>0</b>	<b>2.5</b>
3.80	10	836.519999	-0.001	2.5
3.80	0	836.520000	-0.002	2.5
3.80	-10	836.520002	-0.005	2.5
3.80	-20	836.520004	-0.007	2.5
3.80	-30	836.520003	-0.006	2.5

Reference Frequency: Cellular Mid Channel 836.519998MHz @ 20°C				
Limit: to stay +/- 2.5 ppm = 2091.300 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>100%</b>	<b>20</b>	<b>836.519998</b>	<b>0</b>	<b>2.5</b>
85%	20	836.519997	0.001	2.5
115%	20	836.519998	0.000	2.5

**PCS, CDMA2000 1xRTT - MID CHANNEL**

Reference Frequency: PCS Mid Channel 1879.999998MHz @ 20°C				
Limit: within the authorized block or +/- 2.5 ppm = 4700.000 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	1879.999997	0.001	2.5
3.80	40	1879.999998	0.000	2.5
3.80	30	1879.999998	0.000	2.5
<b>3.80</b>	<b>20</b>	<b>1879.999998</b>	<b>0</b>	<b>2.5</b>
3.80	10	1880.000000	-0.001	2.5
3.80	0	1880.000001	-0.002	2.5
3.80	-10	1880.000002	-0.002	2.5
3.80	-20	1880.000002	-0.002	2.5
3.80	-30	1879.999999	-0.001	2.5

Reference Frequency: PCS Mid Channel 1879.999998MHz @ 20°C				
Limit: within the authorized block or +/- 2.5 ppm = 4700.000 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>100%</b>	<b>20</b>	<b>1879.999998</b>	<b>0</b>	<b>2.5</b>
<b>85%</b>	20	1878.999997	531.915	2.5
<b>115%</b>	20	1879.999998	0.000	2.5

**CELL GSM – MID CHANNEL (GPRS)**

Reference Frequency: Cellular Mid Channel 836.599993MHz @ 20°C				
Limit: to stay +/- 2.5 ppm = 2091.500 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	836.599994	-0.001	2.5
3.80	40	836.599963	0.036	2.5
3.80	30	836.599992	0.001	2.5
<b>3.80</b>	<b>20</b>	<b>836.599993</b>	<b>0</b>	2.5
3.80	10	836.600017	-0.029	2.5
3.80	0	836.600026	-0.039	2.5
3.80	-10	836.600032	-0.047	2.5
3.80	-20	836.600013	-0.024	2.5
3.80	-30	836.600026	-0.039	2.5

Reference Frequency: Cellular Mid Channel 836.599993MHz @ 20°C				
Limit: to stay +/- 2.5 ppm = 2091.500 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>100%</b>	<b>20</b>	<b>836.599993</b>	<b>0</b>	<b>2.5</b>
85%	20	836.600026	-0.039	2.5
115%	20	836.599972	0.025	2.5

**PCS, GSM – MID CHANNEL (GPRS)**

Reference Frequency: PCS Mid Channel 1880.000034MHz @ 20°C				
Limit: within the authorized block or +/- 2.5 ppm = 4700.000 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	1880.000025	0.005	2.5
3.80	40	1879.999996	0.020	2.5
3.80	30	1879.999998	0.019	2.5
3.80	<b>20</b>	<b>1880.000034</b>	<b>0</b>	<b>2.5</b>
3.80	10	1880.000054	-0.011	2.5
3.80	0	1880.000075	-0.022	2.5
3.80	-10	1880.000084	-0.027	2.5
3.80	-20	1880.000050	-0.009	2.5
3.80	-30	1880.000067	-0.018	2.5

Reference Frequency: PCS Mid Channel 1880.000034MHz @ 20°C				
Limit: within the authorized block or +/- 2.5 ppm = 4700.000 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>100%</b>	<b>20</b>	<b>1880.000034</b>	<b>0</b>	<b>2.5</b>
85%	20	1880.000051	-0.009	2.5
115%	20	1880.000009	0.013	2.5

**CELL GSM – MID CHANNEL (EGPRS)**

Reference Frequency: Cellular Mid Channel 836.599997MHz @ 20°C				
Limit: to stay +/- 2.5 ppm = 2091.500 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	836.599998	-0.001	2.5
3.80	40	836.599970	0.032	2.5
3.80	30	836.599998	-0.001	2.5
<b>3.80</b>	<b>20</b>	<b>836.599997</b>	<b>0</b>	<b>2.5</b>
3.80	10	836.600023	-0.031	2.5
3.80	0	836.600033	-0.043	2.5
3.80	-10	836.600036	-0.047	2.5
3.80	-20	836.600018	-0.025	2.5
3.80	-30	836.600030	-0.039	2.5

Reference Frequency: Cellular Mid Channel 836.599997MHz @ 20°C				
Limit: to stay +/- 2.5 ppm = 2091.500 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>100%</b>	<b>20</b>	<b>836.599997</b>	<b>0</b>	<b>2.5</b>
85%	20	836.600031	-0.041	2.5
115%	20	836.599978	0.023	2.5

**PCS, GSM – MID CHANNEL (EGPRS)**

Reference Frequency: PCS Mid Channel 1880.000017MHz @ 20°C				
Limit: within the authorized block or +/- 2.5 ppm = 4700.000 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	1880.000002	0.008	2.5
3.80	40	1880.000003	0.007	2.5
3.80	30	1879.999967	0.027	2.5
<b>3.80</b>	<b>20</b>	<b>1880.000017</b>	<b>0</b>	<b>2.5</b>
3.80	10	1880.000089	-0.038	2.5
3.80	0	1880.000100	-0.044	2.5
3.80	-10	1880.000055	-0.020	2.5
3.80	-20	1880.000030	-0.007	2.5
3.80	-30	1880.000020	-0.002	2.5

Reference Frequency: PCS Mid Channel 1880.000017MHz @ 20°C				
Limit: within the authorized block or +/- 2.5 ppm = 4700.000 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>100.00%</b>	<b>20</b>	<b>1880.000017</b>	<b>0</b>	<b>2.5</b>
85.00%	20	1880.000040	-0.012	2.5
115.00%	20	1880.000034	-0.009	2.5

**PCS UMTS, REL 99 – MID CHANNEL**

Reference Frequency: PCS Mid Channel 1880.026242MHz @ 20°C				
Limit: within the authorized block or +/- 2.5 ppm = 4700.066 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	1880.027688	-0.769	2.5
3.80	40	1880.027141	-0.478	2.5
3.80	30	1880.026542	-0.160	2.5
3.80	<b>20</b>	<b>1880.026242</b>	<b>0</b>	<b>2.5</b>
3.80	10	1880.026517	-0.146	2.5
3.80	0	1880.027478	-0.657	2.5
3.80	-10	1880.027070	-0.440	2.5
3.80	-20	1880.027021	-0.414	2.5
3.80	-30	1880.026922	-0.362	2.5

Reference Frequency: PCS Mid Channel 1880.026242MHz @ 20°C				
Limit: within the authorized block or +/- 2.5 ppm = 4700.066 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>100%</b>	<b>20</b>	<b>1880.026242</b>	<b>0</b>	<b>2.5</b>
85%	20	1880.026339	-0.052	2.5
115%	20	1880.026719	-0.254	2.5

**PCS UMTS, HSDPA – MID CHANNEL**

Reference Frequency: PCS Mid Channel 1880.026233MHz @ 20°C				
Limit: within the authorized block or +/- 2.5 ppm = 4700.066 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	1880.027696	-0.778	2.5
3.80	40	1880.027147	-0.486	2.5
3.80	30	1880.026536	-0.161	2.5
3.80	<b>20</b>	<b>1880.026233</b>	<b>0</b>	<b>2.5</b>
3.80	10	1880.026525	-0.155	2.5
3.80	0	1880.027482	-0.664	2.5
3.80	-10	1880.027081	-0.451	2.5
3.80	-20	1880.027028	-0.423	2.5
3.80	-30	1880.026926	-0.369	2.5

Reference Frequency: PCS Mid Channel 1880.026233MHz @ 20°C				
Limit: within the authorized block or +/- 2.5 ppm = 4700.066 Hz				
Power Supply (Vdc)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>100%</b>	<b>20</b>	<b>1880.026233</b>	<b>0</b>	<b>2.5</b>
85%	20	1880.026345	-0.060	2.5
115%	20	1880.026726	-0.262	2.5

**LTE QPSK BAND 13 –782 MHZ**

Reference Frequency: LTE Band 782.000008MHz @ 20°C				
Limit: to stay +- 2.5 ppm = 1955.000 Hz				
Power Supply (Vac)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	781.999996	0.015	2.5
3.80	40	781.999995	0.017	2.5
3.80	30	781.999996	0.015	2.5
<b>3.80</b>	<b>20</b>	<b>782.000008</b>	<b>0</b>	2.5
3.80	10	782.000004	0.005	2.5
3.80	0	782.000005	0.004	2.5
3.80	-10	782.000007	0.002	2.5
3.80	-20	782.000012	-0.005	2.5
3.80	-30	782.000010	-0.003	2.5

Reference Frequency: Cellular Mid Channel782.000008Hz @ 20°C				
Limit: to stay +- 2.5 ppm = 1955.000 Hz				
Power Supply (Vac)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>100%</b>	<b>20</b>	<b>782.000008</b>	<b>0</b>	<b>2.5</b>
85%	20	782.000003	0.006	2.5
115%	20	781.999995	0.017	2.5

**LTE 16QAM BAND 13 –782 MHZ**

Reference Frequency: LTE Band 782.000009MHz @ 20°C				
Limit: to stay +- 2.5 ppm = 1955.000 Hz				
Power Supply (Vac)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
3.80	50	782.000009	0.000	2.5
3.80	40	782.000007	0.003	2.5
3.80	30	782.000006	0.004	2.5
<b>3.80</b>	<b>20</b>	<b>782.000009</b>	<b>0</b>	2.5
3.80	10	782.000006	0.004	2.5
3.80	0	782.000003	0.008	2.5
3.80	-10	781.999996	0.017	2.5
3.80	-20	781.999997	0.015	2.5
3.80	-30	781.999995	0.018	2.5

Reference Frequency: Cellular Mid Channel782.000009MHz @ 20°C				
Limit: to stay +- 2.5 ppm = 1955.000 Hz				
Power Supply (Vac)	Environment Temperature (°C)	Frequency Deviation Measured with Time Elapse		
		(MHz)	Delta (ppm)	Limit (ppm)
<b>100%</b>	<b>20</b>	<b>782.000009</b>	<b>0</b>	<b>2.5</b>
85%	20	782.000006	0.004	2.5
115%	20	781.999997	0.015	2.5

## 9. RADIATED TEST RESULTS

### 9.1. RADIATED POWER (ERP & EIRP)

#### RULE PART(S)

FCC: §2.1046, §22.913, §24.232 and 27

#### LIMITS

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

24.232(c) - 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.

27.50 (c)(10) Portable stations (hand-held devices) transmitting in the 746–757 MHz, 758–763 MHz, 776–793 MHz, and 805–806 MHz bands are limited to 3 watts ERP.

#### TEST PROCEDURE

ANSI / TIA / EIA 603C

#### MODES TESTED

- 1xRTT – RC1, 55
- CDMA2000 1xEV-DO Revision A (Rev. A)
- GPRS and EGPRS
- UMTS, REL 99 and HSDPA
- LTE Band 13

#### RESULTS

**ERP CELL BANDS**

Mode	EUT	Channel	f (MHz)	ERP	
				dBm	mW
CDMA2000 1xRTT	STANDARD COVER	1013	824.70	23.67	232.81
		384	836.52	23.80	239.88
		777	848.31	<b>24.42</b>	276.69
	INDUCTIVE COVER	1013	824.70	24.03	252.93
		384	836.52	24.49	281.19
		777	848.31	<b>24.85</b>	305.49
	INDUCTIVE CHARGER	1013	824.70	<b>21.92</b>	155.60
		384	836.52	20.87	122.18
		777	848.31	21.31	135.21
CDMA2000 EVDO-REV A	STANDARD COVER	1013	824.70	23.07	202.77
		384	836.52	<b>23.44</b>	220.80
		777	848.31	22.11	162.55
	INDUCTIVE COVER	1013	824.70	23.57	227.51
		384	836.52	<b>24.26</b>	266.69
		777	848.31	23.46	221.82
	INDUCTIVE CHARGER	1013	824.70	<b>20.00</b>	100.00
		384	836.52	19.00	79.43
		777	848.31	19.90	97.72

Mode	EUT	Channel	f (MHz)	ERP	
				dBm	mW
GPRS	STANDARD COVER	128	824.20	29.97	993.12
		190	836.60	<b>30.90</b>	1230.27
		251	848.80	30.14	1032.76
	INDUCTIVE COVER	128	824.20	29.74	941.89
		190	836.60	30.42	1101.54
		251	848.80	<b>30.65</b>	1161.45
	INDUCTIVE CHARGER	128	824.20	<b>29.52</b>	895.36
		190	836.60	28.12	648.63
		251	848.80	28.67	736.21
EGPRS	STANDARD COVER	128	824.20	<b>26.68</b>	465.59
		190	836.60	26.48	444.63
		251	848.80	25.56	359.75
	INDUCTIVE COVER	128	824.20	26.44	440.55
		190	836.60	<b>26.70</b>	467.74
		251	848.80	25.74	374.97
	INDUCTIVE CHARGER	128	824.20	<b>25.53</b>	357.27
		190	836.60	23.96	248.89
		251	848.80	24.50	281.84



**EIRP PCS BANDS**

Mode	EUT	Channel	f (MHz)	EIRP	
				dBm	mW
CDMA2000 1xRTT	STANDARD COVER	25	1851.25	28.25	668.34
		600	1880.00	<b>29.66</b>	924.70
		1175	1908.75	28.87	770.90
	INDUCTIVE COVER	25	1851.25	28.70	741.31
		600	1880.00	<b>29.90</b>	977.24
		1175	1908.75	29.06	805.38
	INDUCTIVE CHARGER	25	1851.25	27.49	561.05
		600	1880.00	<b>29.65</b>	922.57
		1175	1908.75	28.19	659.17
CDMA2000 EVDO-REV A	STANDARD COVER	25	1851.25	30.92	1235.95
		600	1880.00	30.61	1150.80
		1175	1908.75	<b>30.93</b>	1238.80
	INDUCTIVE COVER	25	1851.25	<b>31.72</b>	1485.94
		600	1880.00	31.51	1415.79
		1175	1908.75	30.83	1210.60
	INDUCTIVE CHARGER	25	1851.25	24.38	274.16
		600	1880.00	25.13	325.84
		1175	1908.75	<b>25.26</b>	335.74

Mode	EUT	Channel	f (MHz)	EIRP	
				dBm	mW
GPRS	STANDARD COVER	512	1850.20	<b>30.42</b>	1101.54
		661	1880.00	29.61	914.11
		810	1909.80	28.43	696.63
	INDUCTIVE COVER	512	1850.20	<b>31.42</b>	1386.76
		661	1880.00	30.41	1099.01
		810	1909.80	29.63	918.33
	INDUCTIVE CHARGER	512	1850.20	26.68	465.59
		661	1880.00	26.63	460.26
		810	1909.80	<b>27.26</b>	532.11
EGPRS	STANDARD COVER	512	1850.20	30.45	1109.17
		661	1880.00	<b>31.26</b>	1336.60
		810	1909.80	30.72	1180.32
	INDUCTIVE COVER	512	1850.20	28.43	696.63
		661	1880.00	<b>29.19</b>	829.85
		810	1909.80	28.75	749.89
	INDUCTIVE CHARGER	512	1850.20	29.55	901.57
		661	1880.00	<b>29.58</b>	907.82
		810	1909.80	30.06	1013.91

Mode	EUT	Channel	f (MHz)	EIRP	
				dBm	mW
UMTS, REL 99	STANDARD COVER	9662	1852.40	26.52	448.75
		9800	1880.00	25.81	381.07
		9938	1907.60	25.63	365.59
	INDUCTIVE COVER	9662	1852.40	29.92	981.75
		9800	1880.00	28.75	749.89
		9938	1907.60	28.83	763.84
	INDUCTIVE CHARGER	9662	1852.40	23.38	217.77
		9800	1880.00	23.93	247.17
		9938	1907.60	24.76	299.23
UMTS, HSDPA	STANDARD COVER	9662	1852.40	27.22	527.23
		9800	1880.00	27.31	538.27
		9938	1907.60	27.23	528.45
	INDUCTIVE COVER	9662	1852.40	29.42	874.98
		9800	1880.00	28.81	760.33
		9938	1907.60	29.63	918.33
	INDUCTIVE CHARGER	9662	1852.40	24.38	274.16
		9800	1880.00	23.63	230.67
		9938	1907.60	24.66	292.42

**LTE BAND 13 (ERP)**

**STANDARD COVER**

Mode	RB/RB SIZE	f (MHz)	ERP	
			dBm	mW
10 MHZ BAND QPSK	1/0	782.0	28.58	721.11
	1/49		28.43	696.63
	25/12		29.74	941.89
	50/0		29.82	959.40
10 MHz BAND 16QAM	1/0		28.70	741.31
	1/49		28.58	721.11
	25/12		30.09	1020.94
	50/0		30.10	1023.29

**INDUCTIVE COVER**

Mode	RB/RB SIZE	f (MHz)	ERP	
			dBm	mW
10 MHZ BAND QPSK	1/0	782.0	27.88	613.76
	1/49		27.19	523.60
	25/12		27.81	603.95
	50/0		29.12	816.58
10 MHz BAND 16QAM	1/0		27.96	625.17
	1/49		27.27	533.33
	25/12		28.30	676.08
	50/0		29.49	889.20

**INDUCTIVE CHARGER**

Mode	RB/RB SIZE	f (MHz)	ERP	
			dBm	mW
10 MHZ BAND QPSK	1/0	782.0	20.73	118.30
	1/49		20.13	103.04
	25/12		21.04	127.06
	50/0		21.58	143.88
10 MHZ BAND 16QAM	1/0		20.89	122.74
	1/49		20.39	109.40
	25/12		21.71	148.25
	50/0		22.27	168.66

**1xRTT (Cellular Band)**

**EUT (STANDARD COVER)**

High Frequency Substitution Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		03/29/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT (STANDARD COVDR) AND AC ADAPTER						
<b>Mode:</b>		TX, 850 MHz BAND, CDMA 1xRTT MODE						
<b>Test Equipment:</b>								
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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	24.17	V	0.5	0.0	23.67	38.5	-14.8	
824.20	17.15	H	0.5	0.0	16.65	38.5	-21.8	
836.60	24.30	V	0.5	0.0	23.80	38.5	-14.7	
836.60	16.62	H	0.5	0.0	16.12	38.5	-22.3	
848.80	24.92	V	0.5	0.0	24.42	38.5	-14.0	
848.80	17.80	H	0.5	0.0	17.30	38.5	-21.1	
Rev. 3.17.11								

**EUT (INDUCTIVE COVER)**

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

**Company:** LG ELECTRONICS  
**Project #:** 12U14331  
**Date:** 03/29/12  
**Test Engineer:** MENGISTU MEKURIA  
**Configuration:** EUT (INDUCTIVE COVDR) AND AC ADAPTER  
**Mode:** TX, 850 MHz BAND, CDMA 1xRTT MODE

**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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	24.53	V	0.5	0.0	24.03	38.5	-14.4	
824.20	17.68	H	0.5	0.0	17.18	38.5	-21.3	
836.60	24.99	V	0.5	0.0	24.49	38.5	-14.0	
836.60	17.25	H	0.5	0.0	16.75	38.5	-21.7	
848.80	25.35	V	0.5	0.0	24.85	38.5	-13.6	
848.80	18.18	H	0.5	0.0	17.68	38.5	-20.8	

Rev. 3.17.11

**EUT (ON INDUCTIVE CHARGER)**

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

**Company:** LG ELECTRONICS  
**Project #:** 12U14331  
**Date:** 03/29/12  
**Test Engineer:** MENGISTU MEKURIA  
**Configuration:** EUT (INDUCTIVE CHARGER) AND AC ADAPTER  
**Mode:** TX, 850 MHz BAND, CDMA 1xRTT MODE

**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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	20.80	V	0.5	0.0	20.30	38.5	-18.1	
824.20	22.42	H	0.5	0.0	21.92	38.5	-16.5	
836.60	21.37	V	0.5	0.0	20.87	38.5	-17.6	
836.60	20.99	H	0.5	0.0	20.49	38.5	-18.0	
848.80	20.32	V	0.5	0.0	19.82	38.5	-18.6	
848.80	21.81	H	0.5	0.0	21.31	38.5	-17.1	

Rev. 3.17.11

**EVDO REV A (Cellular Band)**

**EUT (STANDARD COVER)**

High Frequency Substitution Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/11/12						
<b>Test Engineer:</b>		Chin Pang						
<b>Configuration:</b>		EUT (Standard COVDR) AND AC ADAPTER						
<b>Mode:</b>		TX, 850 MHz BAND, CDMA EVDO, Rev A						
<b><u>Test Equipment:</u></b>								
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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	23.57	V	0.5	0.0	23.07	38.5	-15.4	
824.20	18.20	H	0.5	0.0	17.70	38.5	-20.7	
836.60	23.94	V	0.5	0.0	23.44	38.5	-15.0	
836.60	17.60	H	0.5	0.0	17.10	38.5	-21.4	
848.80	22.61	V	0.5	0.0	22.11	38.5	-16.3	
848.80	17.60	H	0.5	0.0	17.10	38.5	-21.3	
Rev. 3.17.11								

**EUT (INDUCTIVE COVER)**

<b>High Frequency Substitution Measurement Compliance Certification Services Chamber B</b>								
<b>Company:</b>	LG ELECTRONICS							
<b>Project #:</b>	12U14331							
<b>Date:</b>	04/11/12							
<b>Test Engineer:</b>	Chin Pang							
<b>Configuration:</b>	EUT (INDUCTIVE COVER) AND AC ADAPTER							
<b>Mode:</b>	TX, 850 MHz BAND, CDMA EVDO, Rev A							
<b>Test Equipment:</b>								
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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	24.07	V	0.5	0.0	23.57	38.5	-14.9	
824.20	21.80	H	0.5	0.0	21.30	38.5	-17.1	
836.60	24.76	V	0.5	0.0	24.26	38.5	-14.2	
836.60	21.30	H	0.5	0.0	20.80	38.5	-17.7	
848.80	23.96	V	0.5	0.0	23.46	38.5	-15.0	
848.80	21.85	H	0.5	0.0	21.35	38.5	-17.1	
Rev. 3.17.11								



**EUT (ON INDUCTIVE CHARGER)**

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

**Company:** LG ELECTRONICS  
**Project #:** 12U14331  
**Date:** 04/11/12  
**Test Engineer:** Chin Pang  
**Configuration:** EUT (On INDUCTIVE CHARGER) and Earphone  
**Mode:** TX, 850 MHz BAND, CDMA EVDO Rev A

**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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	18.47	V	0.5	0.0	17.97	38.5	-20.5	
824.20	20.50	H	0.5	0.0	20.00	38.5	-18.4	
836.60	18.14	V	0.5	0.0	17.64	38.5	-20.8	
836.60	19.50	H	0.5	0.0	19.00	38.5	-19.5	
848.80	16.81	V	0.5	0.0	16.31	38.5	-22.1	
848.80	20.40	H	0.5	0.0	19.90	38.5	-18.5	

Rev. 3.17.11

**GPRS (Cellular Band)**

**EUT (STANDARD COVER)**

High Frequency Substitution Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/02/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT (STANDARD COVER), HEADSET, AND AC ADAPTER						
<b>Mode:</b>		TX, 850MHz BAND GPRS MODE						
<b><u>Test Equipment:</u></b>								
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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	30.47	V	0.5	0.0	29.97	38.5	-8.5	
824.20	23.32	H	0.5	0.0	22.82	38.5	-15.6	
836.60	31.40	V	0.5	0.0	30.90	38.5	-7.6	
836.60	22.53	H	0.5	0.0	22.03	38.5	-16.4	
848.80	30.64	V	0.5	0.0	30.14	38.5	-8.3	
848.80	23.87	H	0.5	0.0	23.37	38.5	-15.1	
Rev. 3.17.11								

**EUT (INDUCTIVE COVER)**

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

**Company:** LG ELECTRONICS  
**Project #:** 12U14331  
**Date:** 04/02/12  
**Test Engineer:** MENGISTU MEKURIA  
**Configuration:** EUT (INDUCTIVE COVER), HEADSET, AND AC ADAPTER  
**Mode:** TX, 850MHz BAND GPRS MODE

**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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	30.24	V	0.5	0.0	29.74	38.5	-8.7	
824.20	24.62	H	0.5	0.0	24.12	38.5	-14.3	
836.60	30.92	V	0.5	0.0	30.42	38.5	-8.0	
836.60	24.53	H	0.5	0.0	24.03	38.5	-14.4	
848.80	31.15	V	0.5	0.0	30.65	38.5	-7.8	
848.80	24.52	H	0.5	0.0	24.02	38.5	-14.4	

Rev. 3.17.11

**EUT (ON INDUCTIVE CHARGER)**

High Frequency Substitution Measurement Compliance Certification Services Chamber B								
<b>Company:</b>	LG ELECTRONICS							
<b>Project #:</b>	12U14331							
<b>Date:</b>	04/02/12							
<b>Test Engineer:</b>	MENGISTU MEKURIA							
<b>Configuration:</b>	EUT (INDUCTIVE CHARGER), HEADSET, AND AC ADAPTER							
<b>Mode:</b>	TX, 850MHz BAND GPRS MODE							
<b>Test Equipment:</b>								
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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	25.13	V	0.5	0.0	24.63	38.5	-13.8	
824.20	30.02	H	0.5	0.0	29.52	38.5	-8.9	
836.60	25.21	V	0.5	0.0	24.71	38.5	-13.7	
836.60	28.62	H	0.5	0.0	28.12	38.5	-10.3	
848.80	22.95	V	0.5	0.0	22.45	38.5	-16.0	
848.80	29.17	H	0.5	0.0	28.67	38.5	-9.8	
Rev. 3.17.11								

**EGPRS (Cellular Band)**

**EUT (STANDARD COVER)**

High Frequency Substitution Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/02/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT (STANDARD COVER), HEADSET, AND AC ADAPTER						
<b>Mode:</b>		TX, 850MHz BAND EGPRS MODE						
<b><u>Test Equipment:</u></b>								
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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	27.18	V	0.5	0.0	26.68	38.5	-11.8	
824.20	21.62	H	0.5	0.0	21.12	38.5	-17.3	
836.60	26.98	V	0.5	0.0	26.48	38.5	-12.0	
836.60	20.38	H	0.5	0.0	19.88	38.5	-18.6	
848.80	26.06	V	0.5	0.0	25.56	38.5	-12.9	
848.80	21.49	H	0.5	0.0	20.99	38.5	-17.5	
Rev. 3.17.11								

**EUT (INDUCTIVE COVER)**

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

**Company:** LG ELECTRONICS  
**Project #:** 12U14331  
**Date:** 04/02/12  
**Test Engineer:** MENGISTU MEKURIA  
**Configuration:** EUT (INDUCTIV COVER), HEADSET, AND AC ADAPTER  
**Mode:** TX, 850MHz BAND EGPRS MODE

**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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	26.94	V	0.5	0.0	26.44	38.5	-12.0	
824.20	20.15	H	0.5	0.0	19.65	38.5	-18.8	
836.60	27.20	V	0.5	0.0	26.70	38.5	-11.8	
836.60	19.43	H	0.5	0.0	18.93	38.5	-19.5	
848.80	26.24	V	0.5	0.0	25.74	38.5	-12.7	
848.80	19.51	H	0.5	0.0	19.01	38.5	-19.4	

Rev. 3.17.11

**EUT (ON INDUCTIVE CHARGER)**

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

**Company:** LG ELECTRONICS  
**Project #:** 12U14331  
**Date:** 04/02/12  
**Test Engineer:** MENGISTU MEKURIA  
**Configuration:** EUT (INDUCTIVE CHARGER), HEADSET, AND AC ADAPTER  
**Mode:** TX, 850MHz BAND EGPRS MODE

**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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.20	21.67	V	0.5	0.0	21.17	38.5	-17.3	
824.20	26.03	H	0.5	0.0	25.53	38.5	-12.9	
836.60	21.64	V	0.5	0.0	21.14	38.5	-17.3	
836.60	24.46	H	0.5	0.0	23.96	38.5	-14.5	
848.80	19.73	V	0.5	0.0	19.23	38.5	-19.2	
848.80	25.00	H	0.5	0.0	24.50	38.5	-13.9	

Rev. 3.17.11

**1xRTT (PCS Band)**

**EUT (STANDARD COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B									
<b>Company:</b>		LG ELECTRONICS							
<b>Project #:</b>		12U14331							
<b>Date:</b>		03/29/12							
<b>Test Engineer:</b>		MENGISTU MEKURIA							
<b>Configuration:</b>		EUT (STANDARD COVER) AND AC ADAPTER							
<b>Mode:</b>		TX, 1900 MHz BAND, CDMA 1xRTT MODE							
<b>Test Equipment:</b>									
Receiving: Horn T59, and Camber B SMA Cables									
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
1.850	16.3	V	0.85	8.62	24.02	33.0	-9.0		
1.850	20.6	H	0.85	8.47	28.25	33.0	-4.8		
1.880	15.3	V	0.85	8.46	22.94	33.0	-10.1		
1.880	22.2	H	0.85	8.36	29.66	33.0	-3.3		
1.910	14.4	V	0.85	8.30	21.85	33.0	-11.2		
1.910	21.5	H	0.85	8.25	28.87	33.0	-4.1		
Rev. 3.17.11									



**EUT (INDUCTIVE COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		03/29/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT (INDUCTIVE COVER) AND AC ADAPTER						
<b>Mode:</b>		TX, 1900 MHz BAND, CDMA 1xRTT MODE						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	16.2	V	0.85	8.62	23.92	33.0	-9.1	
1.850	21.1	H	0.85	8.47	28.70	33.0	-4.3	
1.880	15.1	V	0.85	8.46	22.69	33.0	-10.3	
1.880	22.4	H	0.85	8.36	29.90	33.0	-3.1	
1.910	13.9	V	0.85	8.30	21.36	33.0	-11.6	
1.910	21.7	H	0.85	8.25	29.06	33.0	-3.9	
Rev. 3.17.11								

**EUT (ON INDUCTIVE CHARGER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		03/29/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT (INDUCTIVE CHARGER) AND AC ADAPTER						
<b>Mode:</b>		TX, 1900 MHz BAND, CDMA 1xRTT MODE						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	14.1	V	0.85	8.62	21.83	33.0	-11.2	
1.850	19.9	H	0.85	8.47	27.49	33.0	-5.5	
1.880	14.1	V	0.85	8.46	21.68	33.0	-11.3	
1.880	22.1	H	0.85	8.36	29.65	33.0	-3.4	
1.910	12.4	V	0.85	8.30	19.84	33.0	-13.2	
1.910	20.8	H	0.85	8.25	28.19	33.0	-4.8	
Rev. 3.17.11								

**CDMA2000 1xEV-DO Revision A (PCS Band)**

**EUT (STANDARD COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>	LG ELECTRONICS							
<b>Project #:</b>	12U14331							
<b>Date:</b>	04/11/12							
<b>Test Engineer:</b>	Chin Pang							
<b>Configuration:</b>	EUT (STANDARD COVDR) AND AC ADAPTER							
<b>Mode:</b>	TX, 1900 MHz BAND, CDMA EVDO Rev A							
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	23.2	V	0.85	8.62	30.92	33.0	-2.1	
1.850	14.5	H	0.85	8.47	22.08	33.0	-10.9	
1.880	23.0	V	0.85	8.46	30.61	33.0	-2.4	
1.880	14.6	H	0.85	8.36	22.13	33.0	-10.9	
1.910	23.5	V	0.85	8.30	30.93	33.0	-2.1	
1.910	14.8	H	0.85	8.25	22.16	33.0	-10.8	
Rev. 3.17.11								

**EUT (INDUCTIVE COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/11/12						
<b>Test Engineer:</b>		Chin Pang						
<b>Configuration:</b>		EUT (Inductive COVDR) AND AC ADAPTER						
<b>Mode:</b>		TX, 1900 MHz BAND, CDMA EVDO Rev A						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	24.0	V	0.85	8.62	31.72	33.0	-1.3	
1.850	13.8	H	0.85	8.47	21.38	33.0	-11.6	
1.880	23.9	V	0.85	8.46	31.51	33.0	-1.5	
1.880	15.6	H	0.85	8.36	23.13	33.0	-9.9	
1.910	23.4	V	0.85	8.30	30.83	33.0	-2.2	
1.910	16.3	H	0.85	8.25	23.66	33.0	-9.3	
Rev. 3.17.11								

**EUT (ON INDUCTIVE CHARGER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/11/12						
<b>Test Engineer:</b>		Chin Pang						
<b>Configuration:</b>		EUT (INDUCTIVE CHARGER) AND AC ADAPTER						
<b>Mode:</b>		TX, 1900 MHz BAND, CDMA 1xRTT MODE						
<b><u>Test Equipment:</u></b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	14.0	V	0.85	8.62	21.72	33.0	-11.3	
1.850	16.8	H	0.85	8.47	24.38	33.0	-8.6	
1.880	12.7	V	0.85	8.46	20.31	33.0	-12.7	
1.880	17.6	H	0.85	8.36	25.13	33.0	-7.9	
1.910	12.2	V	0.85	8.30	19.63	33.0	-13.4	
1.910	17.9	H	0.85	8.25	25.26	33.0	-7.7	
Rev. 3.17.11								

**GPRS (PCS Band)**

**EUT (STANDARD COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/14/12						
<b>Test Engineer:</b>		Chin Pang						
<b>Configuration:</b>		EUT ( Standard Cover) with AC Adapter and Earphone						
<b>Mode:</b>		TX, 1900 MHz BAND, GPRS						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	22.7	V	0.85	8.62	30.42	33.0	-2.6	
1.850	15.8	H	0.85	8.47	23.38	33.0	-9.6	
1.880	22.0	V	0.85	8.46	29.61	33.0	-3.4	
1.880	15.8	H	0.85	8.36	23.33	33.0	-9.7	
1.910	21.0	V	0.85	8.30	28.43	33.0	-4.6	
1.910	17.7	H	0.85	8.25	25.06	33.0	-7.9	
Rev. 3.17.11								

**EUT (INDUCTIVE COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/14/12						
<b>Test Engineer:</b>		Chin Pang						
<b>Configuration:</b>		EUT ( Inductive Cover) with AC Adapter and Earphone						
<b>Mode:</b>		TX, 1900 MHz BAND, GPRS						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	23.7	V	0.85	8.62	31.42	33.0	-1.6	
1.850	13.2	H	0.85	8.47	20.78	33.0	-12.2	
1.880	22.8	V	0.85	8.46	30.41	33.0	-2.6	
1.880	13.8	H	0.85	8.36	21.33	33.0	-11.7	
1.910	22.2	V	0.85	8.30	29.63	33.0	-3.4	
1.910	14.4	H	0.85	8.25	21.76	33.0	-11.2	
Rev. 3.17.11								

**EUT (ON INDUCTIVE CHARGER)**

<b>High Frequency Fundamental Measurement Compliance Certification Services Chamber B</b>								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/11/12						
<b>Test Engineer:</b>		Chin Pang						
<b>Configuration:</b>		EUT ( On Inductive Charger) and Earphone						
<b>Mode:</b>		TX, 1900 MHz BAND, GPRS						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	18.2	V	0.85	8.62	25.92	33.0	-7.1	
1.850	19.1	H	0.85	8.47	26.68	33.0	-6.3	
1.880	17.0	V	0.85	8.46	24.61	33.0	-8.4	
1.880	19.1	H	0.85	8.36	26.63	33.0	-6.4	
1.910	17.4	V	0.85	8.30	24.83	33.0	-8.2	
1.910	19.9	H	0.85	8.25	27.26	33.0	-5.7	
Rev. 3.17.11								



**EGPRS (PCS Band)**

**EUT (STANDARD COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/16/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT ( Standard Cover) with AC Adapter and Earphone						
<b>Mode:</b>		TX, 1900 MHz BAND, EGPRS						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	14.5	V	0.85	8.62	22.28	33.0	-10.7	
1.850	22.8	H	0.85	8.47	30.45	33.0	-2.6	
1.880	14.5	V	0.85	8.46	22.10	33.0	-10.9	
1.880	23.8	H	0.85	8.36	31.26	33.0	-1.7	
1.910	13.9	V	0.85	8.30	21.38	33.0	-11.6	
1.910	23.3	H	0.85	8.25	30.72	33.0	-2.3	
Rev. 3.17.11								

**EUT (INDUCTIVE COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>	LG ELECTRONICS							
<b>Project #:</b>	12U14331							
<b>Date:</b>	04/16/12							
<b>Test Engineer:</b>	MENGISTU MEKURIA							
<b>Configuration:</b>	EUT ( Inductive Cover) with AC Adapter and Earphone							
<b>Mode:</b>	TX, 1900 MHz BAND, EGPRS							
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	15.0	V	0.85	8.62	22.78	33.0	-10.2	
1.850	20.8	H	0.85	8.47	28.43	33.0	-4.6	
1.880	14.4	V	0.85	8.46	21.97	33.0	-11.0	
1.880	21.7	H	0.85	8.36	29.19	33.0	-3.8	
1.910	14.8	V	0.85	8.30	22.20	33.0	-10.8	
1.910	21.4	H	0.85	8.25	28.75	33.0	-4.3	
Rev. 3.17.11								

**EUT (ON INDUCTIVE CHARGER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/16/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT ( On Inductive Charger) and Earphone						
<b>Mode:</b>		TX, 1900 MHz BAND, EGPRS						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.850	15.6	V	0.85	8.62	23.35	33.0	-9.7	
1.850	21.9	H	0.85	8.47	29.55	33.0	-3.5	
1.880	14.2	V	0.85	8.46	21.81	33.0	-11.2	
1.880	22.1	H	0.85	8.36	29.58	33.0	-3.4	
1.910	15.4	V	0.85	8.30	22.81	33.0	-10.2	
1.910	22.7	H	0.85	8.25	30.06	33.0	-2.9	
Rev. 3.17.11								

**UMTS REL 99 (PCS Band)**

**EUT (STANDARD COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B									
<b>Company:</b>		LG ELECTRONICS							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/11/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (Standard Cover) with AC Adapter and Earphone							
<b>Mode:</b>		TX, 1900 MHz BAND, WCDMA Rel 99							
<b>Test Equipment:</b>									
Receiving: Horn T59, and Camber B SMA Cables									
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse									
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes	
1.852	18.8	V	0.85	8.62	26.52	33.0	-6.5		
1.852	10.8	H	0.85	8.47	18.38	33.0	-14.6		
1.880	18.2	V	0.85	8.46	25.81	33.0	-7.2		
1.880	10.3	H	0.85	8.36	17.83	33.0	-15.2		
1.908	18.2	V	0.85	8.30	25.63	33.0	-7.4		
1.908	12.3	H	0.85	8.25	19.66	33.0	-13.3		
Rev. 3.17.11									

**EUT (INDUCTIVE COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>	LG ELECTRONICS							
<b>Project #:</b>	12U14331							
<b>Date:</b>	04/11/12							
<b>Test Engineer:</b>	Chin Pang							
<b>Configuration:</b>	EUT (Inductive Cover) with AC Adapter and Earphone							
<b>Mode:</b>	TX, 1900 MHz BAND, WCDMA Rel 99							
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.852	22.2	V	0.85	8.62	29.92	33.0	-3.1	
1.852	11.5	H	0.85	8.47	19.08	33.0	-13.9	
1.880	21.1	V	0.85	8.46	28.75	33.0	-4.3	
1.880	10.3	H	0.85	8.36	17.83	33.0	-15.2	
1.908	21.4	V	0.85	8.30	28.83	33.0	-4.2	
1.908	15.3	H	0.85	8.25	22.66	33.0	-10.3	
Rev. 3.17.11								

**EUT (ON INDUCTIVE CHARGER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/11/12						
<b>Test Engineer:</b>		Chin Pang						
<b>Configuration:</b>		EUT (INDUCTIVE CHARGER) and Earphone						
<b>Mode:</b>		TX, 1900 MHz BAND, WCDMA Rel 99						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.852	11.0	V	0.85	8.62	18.72	33.0	-14.3	
1.852	15.8	H	0.85	8.47	23.38	33.0	-9.6	
1.880	11.9	V	0.85	8.46	19.51	33.0	-13.5	
1.880	16.4	H	0.85	8.36	23.93	33.0	-9.1	
1.908	11.2	V	0.85	8.30	18.63	33.0	-14.4	
1.908	17.4	H	0.85	8.25	24.76	33.0	-8.2	
Rev. 3.17.11								

**UMTS HSDPA (PCS Band)**

**EUT (STANDARD COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/11/12						
<b>Test Engineer:</b>		Chin Pang						
<b>Configuration:</b>		EUT (Standard Cover) with AC Adapter and Earphone						
<b>Mode:</b>		TX, 1900 MHz BAND, WCDMA HSDPA						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.852	19.5	V	0.85	8.62	27.22	33.0	-5.8	
1.852	12.9	H	0.85	8.47	20.48	33.0	-12.5	
1.880	19.7	V	0.85	8.46	27.31	33.0	-5.7	
1.880	14.5	H	0.85	8.36	22.03	33.0	-11.0	
1.908	19.8	V	0.85	8.30	27.23	33.0	-5.8	
1.908	15.3	H	0.85	8.25	22.66	33.0	-10.3	
Rev. 3.17.11								

**EUT (INDUCTIVE COVER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/11/12						
<b>Test Engineer:</b>		Chin Pang						
<b>Configuration:</b>		EUT (Inductive Cover) with AC Adapter and Earphone						
<b>Mode:</b>		TX, 1900 MHz BAND, WCDMA HSDPA						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.852	21.7	V	0.85	8.62	29.42	33.0	-3.6	
1.852	11.3	H	0.85	8.47	18.88	33.0	-14.1	
1.880	21.2	V	0.85	8.46	28.81	33.0	-4.2	
1.880	12.3	H	0.85	8.36	19.83	33.0	-13.2	
1.908	22.2	V	0.85	8.30	29.63	33.0	-3.4	
1.908	13.6	H	0.85	8.25	20.96	33.0	-12.0	
Rev. 3.17.11								



**EUT (INDUCTIVE CHARGER)**

High Frequency Fundamental Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		04/11/12						
<b>Test Engineer:</b>		Chin Pang						
<b>Configuration:</b>		EUT (INDUCTIVE CHARGER) and Earphone						
<b>Mode:</b>		TX, 1900 MHz BAND, WCDMA HSDPA						
<b>Test Equipment:</b>								
Receiving: Horn T59, and Camber B SMA Cables								
Substitution: Horn T217 Substitution, 4ft SMA Cable (244639001) Warehouse								
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.852	11.9	V	0.85	8.62	19.62	33.0	-13.4	
1.852	16.8	H	0.85	8.47	24.38	33.0	-8.6	
1.880	11.7	V	0.85	8.46	19.31	33.0	-13.7	
1.880	16.1	H	0.85	8.36	23.63	33.0	-9.4	
1.908	13.2	V	0.85	8.30	20.63	33.0	-12.4	
1.908	17.3	H	0.85	8.25	24.66	33.0	-8.3	
Rev. 3.17.11								

**LTE BAND 13 QPSK**

**EUT (STANDARD COVER)**

High Frequency Substitution Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		03/29/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT (STANDARD COVDR) AND AC ADAPTER						
<b>Mode:</b>		TX, LTE BAND 13						
<b>Test Equipment:</b>								
Receiving: Sunoi 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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
QPSK								
RB=1 & SRB=0								
782.00	29.08	V	0.5	0.0	28.58	38.5	-9.9	
782.00	18.08	H	0.5	0.0	17.58	38.5	-20.9	
RB=1 & SRB=49								
782.00	28.93	V	0.5	0.0	28.43	38.5	-10.0	
782.00	18.58	H	0.5	0.0	18.08	38.5	-20.4	
RB=25 & SRB=12								
782.00	30.24	V	0.5	0.0	29.74	38.5	-8.7	
782.00	19.18	H	0.5	0.0	18.68	38.5	-19.8	
RB=50 & SRB=0								
782.00	30.32	V	0.5	0.0	29.82	38.5	-8.6	
782.00	19.20	H	0.5	0.0	18.70	38.5	-19.8	
Rev. 3.17.11								

**EUT (INDUCTIVE COVER)**

High Frequency Substitution Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		03/30/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT (INDUCTIVE COVDR) AND AC ADAPTER						
<b>Mode:</b>		TX, LTE BAND 13, QPSK MODE						
<b>Test Equipment:</b>								
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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
<b>RB=1 &amp; SRB=0, QPSK</b>								
782.00	28.38	V	0.5	0.0	27.88	38.5	-10.6	
782.00	17.13	H	0.5	0.0	16.63	38.5	-21.8	
<b>RB=1 &amp; SRB=49, QPSK</b>								
782.00	27.69	V	0.5	0.0	27.19	38.5	-11.3	
782.00	45.49	H	0.5	0.0	44.99	38.5	6.5	
<b>RB=25 &amp; SRB=12, QPSK</b>								
782.00	28.31	V	0.5	0.0	27.81	38.5	-10.6	
782.00	18.16	H	0.5	0.0	17.66	38.5	-20.8	
<b>RB=50 &amp; SRB=0</b>								
782.00	29.62	V	0.5	0.0	29.12	38.5	-9.3	
782.00	18.48	H	0.5	0.0	17.98	38.5	-20.5	
Rev. 3.17.11								

**EUT (ON INDUCTIVE CHARGER)**

High Frequency Substitution Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		03/30/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT (INDUCTIVE CHARGER) AND AC ADAPTER						
<b>Mode:</b>		TX, LTE BAND 13, QPSK MODE						
<b>Test Equipment:</b>								
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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
<b>RB=1 &amp; SRB=0, QPSK</b>								
782.00	20.77	V	0.5	0.0	20.27	38.5	-18.2	
782.00	21.23	H	0.5	0.0	20.73	38.5	-17.7	
<b>RB=1 &amp; SRB=49, QPSK</b>								
782.00	19.07	V	0.5	0.0	18.57	38.5	-19.9	
782.00	20.63	H	0.5	0.0	20.13	38.5	-18.3	
<b>RB=25 &amp; SRB=12, QPSK</b>								
782.00	20.97	V	0.5	0.0	20.47	38.5	-18.0	
782.00	21.54	H	0.5	0.0	21.04	38.5	-17.4	
<b>RB=50 &amp; SRB=0, QPSK</b>								
782.00	21.25	V	0.5	0.0	20.75	38.5	-17.7	
782.00	22.08	H	0.5	0.0	21.58	38.5	-16.9	
Rev. 3.17.11								

**LTE BAND 13 16QAM**

**EUT (STANDARD COVER)**

High Frequency Substitution Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		03/29/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT (STANDARD COVDR) AND AC ADAPTER						
<b>Mode:</b>		TX, LTE BAND 13						
<b>Test Equipment:</b>								
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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
<b>16QAM</b>								
<b>RB=1 &amp; SRB=0</b>								
782.00	29.20	V	0.5	0.0	28.70	38.5	-9.8	
782.00	18.13	H	0.5	0.0	17.63	38.5	-20.8	
<b>RB=1 &amp; SRB=49</b>								
782.00	29.08	V	0.5	0.0	28.58	38.5	-9.9	
782.00	18.66	H	0.5	0.0	18.16	38.5	-20.3	
<b>RB=25 &amp; SRB=12</b>								
782.00	30.59	V	0.5	0.0	30.09	38.5	-8.4	
782.00	19.30	H	0.5	0.0	18.80	38.5	-19.7	
<b>RB=50 &amp; SRB=0</b>								
782.00	30.60	V	0.5	0.0	30.10	38.5	-8.4	
782.00	20.03	H	0.5	0.0	19.53	38.5	-18.9	
Rev. 3.17.11								

**LTE BAND 13 16QAM**

**EUT (INDUCTIVE COVER)**

High Frequency Substitution Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		03/30/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT (INDUCTIVE COVDR) AND AC ADAPTER						
<b>Mode:</b>		TX, LTE BAND 13, 16QAM MODE						
<b>Test Equipment:</b>								
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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
16QAM								
RB=1 & SRB=0								
782.00	28.46	V	0.5	0.0	27.96	38.5	-10.5	
782.00	17.22	H	0.5	0.0	16.72	38.5	-21.7	
RB=1 & SRB=49								
782.00	27.77	V	0.5	0.0	27.27	38.5	-11.2	
782.00	17.35	H	0.5	0.0	16.85	38.5	-21.6	
RB=25 & SRB=12								
782.00	28.80	V	0.5	0.0	28.30	38.5	-10.2	
782.00	18.48	H	0.5	0.0	17.98	38.5	-20.5	
RB=50 & SRB=0								
782.00	29.99	V	0.5	0.0	29.49	38.5	-9.0	
782.00	19.09	H	0.5	0.0	18.59	38.5	-19.9	
Rev. 3.17.11								

**LTE BAND 13 16QAM**

**EUT (ON INDUCTIVE CHARGER)**

High Frequency Substitution Measurement Compliance Certification Services Chamber B								
<b>Company:</b>		LG ELECTRONICS						
<b>Project #:</b>		12U14331						
<b>Date:</b>		03/30/12						
<b>Test Engineer:</b>		MENGISTU MEKURIA						
<b>Configuration:</b>		EUT (INDUCTIVE CHARGER) AND AC ADAPTER						
<b>Mode:</b>		TX, LTE BAND 13, 16QAM MODE						
<b>Test Equipment:</b>								
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	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
16QAM								
RB=1 & SRB=0								
782.00	21.04	V	0.5	0.0	20.54	38.5	-17.9	
782.00	21.39	H	0.5	0.0	20.89	38.5	-17.6	
RB=1 & SRB=49								
782.00	19.11	V	0.5	0.0	18.61	38.5	-19.8	
782.00	20.89	H	0.5	0.0	20.39	38.5	-18.1	
RB=25 & SRB=12								
782.00	21.43	V	0.5	0.0	20.93	38.5	-17.5	
782.00	22.21	H	0.5	0.0	21.71	38.5	-16.7	
RB=50 & SRB=0								
782.00	21.12	V	0.5	0.0	20.62	38.5	-17.8	
782.00	22.77	H	0.5	0.0	22.27	38.5	-16.2	
Rev. 3.17.11								

## 9.2. FIELD STRENGTH OF SPURIOUS RADIATION

### RULE PART(S)

FCC: §2.1053, §22.917, §24.238, & §27.53

### LIMIT

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

(c) For operations in the 746–758 MHz band and the 776–788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following.

(2) On any frequency outside the 776–788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by 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:

- 1xRTT – RC2, SO9
- CDMA2000 1xEV-DO Revision A (Rev. A)
- GPRS and EGPRS
- UMTS, REL 99 and HSDPA
- LTE BAND 13

### RESULTS



**1xRTT (Cellular Band)**

**EUT (STANDARD COVER)**

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/09/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Standard Cover ) with AC Adapter and Earphone							
<b>Mode:</b>		TX, CELL Band CDMA Mode							
<b>Chamber</b>		<b>Pre-amplifier</b>		<b>Filter</b>		<b>Limit</b>			
5m Chamber A		T144 8449B		Filter 1		Part 22			
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 824.70MHz</b>									
1.649	-15.2	V	3.0	38.2	1.0	-52.3	-13.0	-39.3	
4.948	-11.9	V	3.0	36.3	1.0	-47.2	-13.0	-34.2	
6.598	0.7	V	3.0	36.4	1.0	-34.7	-13.0	-21.7	
7.422	1.9	V	3.0	36.6	1.0	-33.7	-13.0	-20.7	
8.247	1.9	V	3.0	36.8	1.0	-33.8	-13.0	-20.8	
9.072	-1.0	H	3.0	37.0	1.0	-37.0	-13.0	-24.0	
1.649	-18.4	H	3.0	38.2	1.0	-55.6	-13.0	-42.6	
6.598	-8.3	H	3.0	36.4	1.0	-43.7	-13.0	-30.7	
8.247	-2.0	H	3.0	36.8	1.0	-37.8	-13.0	-24.8	
9.072	-4.0	H	3.0	37.0	1.0	-40.0	-13.0	-27.0	
<b>Mid Ch, 836.52MHz</b>									
1.673	-14.9	V	3.0	38.1	1.0	-52.0	-13.0	-39.0	
2.510	-13.2	V	3.0	37.5	1.0	-49.6	-13.0	-36.6	
6.692	-1.1	V	3.0	36.4	1.0	-36.6	-13.0	-23.6	
7.529	3.0	V	3.0	36.6	1.0	-32.6	-13.0	-19.6	
8.365	1.1	V	3.0	36.8	1.0	-34.7	-13.0	-21.7	
1.673	-15.7	H	3.0	38.1	1.0	-52.8	-13.0	-39.8	
5.856	-9.5	H	3.0	36.3	1.0	-44.9	-13.0	-31.9	
6.692	-8.1	H	3.0	36.4	1.0	-43.6	-13.0	-30.6	
7.529	-5.9	H	3.0	36.6	1.0	-41.5	-13.0	-28.5	
9.202	-4.8	H	3.0	37.0	1.0	-40.8	-13.0	-27.8	
<b>High Ch, 848.31MHz</b>									
1.697	-17.6	V	3.0	38.1	1.0	-54.7	-13.0	-41.7	
6.787	-3.0	V	3.0	36.5	1.0	-38.4	-13.0	-25.4	
7.635	1.1	V	3.0	36.6	1.0	-34.5	-13.0	-21.5	
8.483	0.2	V	3.0	36.8	1.0	-35.6	-13.0	-22.6	
1.697	-19.0	H	3.0	38.1	1.0	-56.1	-13.0	-43.1	
5.938	-9.4	H	3.0	36.3	1.0	-44.7	-13.0	-31.7	
6.787	-8.0	H	3.0	36.5	1.0	-43.4	-13.0	-30.4	
7.635	-4.8	H	3.0	36.6	1.0	-40.4	-13.0	-27.4	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (INDUCTIVE COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/09/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Inductive Cover ) with AC Adapter and Earphone							
<b>Mode:</b>		TX, CELL Band CDMA Mode							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 22		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 824.70MHz</b>									
1.649	-13.2	V	3.0	38.2	1.0	-50.3	-13.0	-37.3	
6.598	-3.3	V	3.0	36.4	1.0	-38.7	-13.0	-25.7	
7.422	-1.1	V	3.0	36.6	1.0	-36.7	-13.0	-23.7	
8.247	0.9	V	3.0	36.8	1.0	-34.8	-13.0	-21.8	
9.072	-2.0	H	3.0	37.0	1.0	-38.0	-13.0	-25.0	
1.649	-8.4	H	3.0	38.2	1.0	-45.6	-13.0	-32.6	
6.598	-8.3	H	3.0	36.4	1.0	-43.7	-13.0	-30.7	
8.247	-3.0	H	3.0	36.8	1.0	-38.8	-13.0	-25.8	
9.072	-5.0	H	3.0	37.0	1.0	-41.0	-13.0	-28.0	
<b>Mid Ch, 836.52MHz</b>									
1.673	-12.9	V	3.0	38.1	1.0	-50.0	-13.0	-37.0	
6.692	-4.1	V	3.0	36.4	1.0	-39.6	-13.0	-26.6	
7.529	-3.0	V	3.0	36.6	1.0	-38.6	-13.0	-25.6	
8.365	1.1	V	3.0	36.8	1.0	-34.7	-13.0	-21.7	
9.202	-2.8	V	3.0	37.0	1.0	-38.8	-13.0	-25.8	
1.673	-14.2	H	3.0	38.1	1.0	-51.3	-13.0	-38.3	
5.856	-9.5	H	3.0	36.3	1.0	-44.9	-13.0	-31.9	
6.692	-8.1	H	3.0	36.4	1.0	-43.6	-13.0	-30.6	
7.529	-7.9	H	3.0	36.6	1.0	-43.5	-13.0	-30.5	
8.365	-2.9	H	3.0	36.8	1.0	-38.7	-13.0	-25.7	
<b>High Ch, 848.31MHz</b>									
1.697	-6.6	V	3.0	38.1	1.0	-43.7	-13.0	-30.7	
6.787	-7.0	V	3.0	36.5	1.0	-42.4	-13.0	-29.4	
7.635	-1.9	V	3.0	36.6	1.0	-37.5	-13.0	-24.5	
8.483	-0.8	V	3.0	36.8	1.0	-36.6	-13.0	-23.6	
1.697	-11.0	H	3.0	38.1	1.0	-48.1	-13.0	-35.1	
5.938	-9.4	H	3.0	36.3	1.0	-44.7	-13.0	-31.7	
6.787	-8.0	H	3.0	36.5	1.0	-43.4	-13.0	-30.4	
8.483	-5.7	H	3.0	36.8	1.0	-41.6	-13.0	-28.6	
Rev. 03.03.09 Note: No other emissions were detected above the system noise floor.									

**EUT (ON INDUCTIVE CHARGER)**

**Compliance Certification Services**  
**Above 1GHz High Frequency Substitution Measurement**

**Company:** LG  
**Project #:** 12U14331  
**Date:** 04/09/12  
**Test Engineer:** Chin Pang  
**Configuration:** EUT(On Inductive Charger) and Earphone  
**Mode:** TX, CELL Band CDMA Mode

**Chamber**

5m Chamber A

**Pre-amplifier**

T144 8449B

**Filter**

Filter 1

**Limit**

Part 22

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 824.70MHz</b>									
1.649	-17.2	V	3.0	38.2	1.0	-54.3	-13.0	-41.3	
6.598	-5.3	V	3.0	36.4	1.0	-40.7	-13.0	-27.7	
8.247	-4.1	V	3.0	36.8	1.0	-39.8	-13.0	-26.8	
9.072	-5.0	V	3.0	37.0	1.0	-41.0	-13.0	-28.0	
1.649	-15.4	H	3.0	38.2	1.0	-52.6	-13.0	-39.6	
6.598	-5.3	H	3.0	36.4	1.0	-40.7	-13.0	-27.7	
7.422	-3.1	H	3.0	36.6	1.0	-38.6	-13.0	-25.6	
8.247	2.0	H	3.0	36.8	1.0	-33.8	-13.0	-20.8	
9.072	2.0	H	3.0	37.0	1.0	-34.0	-13.0	-21.0	
<b>Mid Ch, 836.52MHz</b>									
1.673	-14.9	V	3.0	38.1	1.0	-52.0	-13.0	-39.0	
6.692	-6.1	V	3.0	36.4	1.0	-41.6	-13.0	-28.6	
7.529	2.0	V	3.0	36.6	1.0	-33.6	-13.0	-20.6	
8.365	-2.9	V	3.0	36.8	1.0	-38.7	-13.0	-25.7	
9.202		V	3.0	37.0	1.0	-36.0	-13.0	-23.0	
1.673	-15.2	H	3.0	38.1	1.0	-52.3	-13.0	-39.3	
5.856	-8.5	H	3.0	36.3	1.0	-43.9	-13.0	-30.9	
6.692	-7.1	H	3.0	36.4	1.0	-42.6	-13.0	-29.6	
7.529	1.1	H	3.0	36.6	1.0	-34.5	-13.0	-21.5	
8.365	0.1	H	3.0	36.8	1.0	-35.7	-13.0	-22.7	
<b>High Ch, 848.31MHz</b>									
1.697	-12.6	V	3.0	38.1	1.0	-49.7	-13.0	-36.7	
6.787	-5.0	V	3.0	36.5	1.0	-40.4	-13.0	-27.4	
7.635	-0.9	V	3.0	36.6	1.0	-36.5	-13.0	-23.5	
8.483	-3.8	V	3.0	36.8	1.0	-39.6	-13.0	-26.6	
1.697	-17.0	H	3.0	38.1	1.0	-54.1	-13.0	-41.1	
6.787	-7.0	H	3.0	36.5	1.0	-42.4	-13.0	-29.4	
7.635	0.2	H	3.0	36.6	1.0	-35.4	-13.0	-22.4	
8.483	-1.7	H	3.0	36.8	1.0	-37.6	-13.0	-24.6	

Rev. 03.03.09  
 Note: No other emissions were detected above the system noise floor.

**CDMA2000 1xEV-DO Revision A (Rev. A) (Cellular Band)**

**EUT (STANDARD COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/10/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Standard Cover ) with AC Adapter and Earphone							
<b>Mode:</b>		TX, CELL Band CDMA2000, EVDO Rev A							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 22		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 824.70MHz</b>									
1.649	-13.2	V	3.0	38.2	1.0	-50.3	-13.0	-37.3	
4.124	-12.1	V	3.0	36.5	1.0	-47.6	-13.0	-34.6	
7.422	-7.1	V	3.0	36.6	1.0	-42.7	-13.0	-29.7	
9.072	1.0	V	3.0	37.0	1.0	-35.0	-13.0	-22.0	
1.649	-14.4	H	3.0	38.2	1.0	-51.6	-13.0	-38.6	
6.598	-6.3	H	3.0	36.4	1.0	-41.7	-13.0	-28.7	
9.072	3.0	H	3.0	37.0	1.0	-33.0	-13.0	-20.0	
<b>Mid Ch, 836.52MHz</b>									
1.673	-13.9	V	3.0	38.1	1.0	-51.0	-13.0	-38.0	
6.692	-9.1	V	3.0	36.4	1.0	-44.6	-13.0	-31.6	
9.202	-0.8	V	3.0	37.0	1.0	-36.8	-13.0	-23.8	
1.673	-12.2	H	3.0	38.1	1.0	-49.3	-13.0	-36.3	
7.529	-3.9	H	3.0	36.6	1.0	-39.5	-13.0	-26.5	
8.365	1.1	H	3.0	36.8	1.0	-34.7	-13.0	-21.7	
9.202	5.2	H	3.0	37.0	1.0	-30.8	-13.0	-17.8	
<b>High Ch, 848.31MHz</b>									
1.697	-12.6	V	3.0	38.1	1.0	-49.7	-13.0	-36.7	
6.787	-3.0	V	3.0	36.5	1.0	-38.4	-13.0	-25.4	
7.635	-1.9	V	3.0	36.6	1.0	-37.5	-13.0	-24.5	
9.331	2.3	V	3.0	37.0	1.0	-33.7	-13.0	-20.7	
1.697	-12.0	H	3.0	38.1	1.0	-49.1	-13.0	-36.1	
5.938	-7.4	H	3.0	36.3	1.0	-42.7	-13.0	-29.7	
7.638	-2.8	H	3.0	36.6	1.0	-38.4	-13.0	-25.4	
9.331	0.3	H	3.0	37.0	1.0	-35.7	-13.0	-22.7	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (INDUCTIVE COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/10/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Inductive Cover ) with AC Adapter and Earphone							
<b>Mode:</b>		TX, CELL Band CDMA2000, EVDO Rev A							
<b>Chamber</b>		<b>Pre-amplifer</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 22		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 824.70MHz</b>									
1.649	-12.2	V	3.0	38.2	1.0	-49.3	-13.0	-36.3	
4.124	-9.1	V	3.0	36.5	1.0	-44.6	-13.0	-31.6	
7.422	-0.1	V	3.0	36.6	1.0	-35.7	-13.0	-22.7	
9.072	-1.0	V	3.0	37.0	1.0	-37.0	-13.0	-24.0	
1.649	-15.4	H	3.0	38.2	1.0	-52.6	-13.0	-39.6	
6.598	-4.3	H	3.0	36.4	1.0	-39.7	-13.0	-26.7	
7.422	-1.1	H	3.0	36.6	1.0	-36.6	-13.0	-23.6	
<b>Mid Ch, 836.52MHz</b>									
1.673	-13.9	V	3.0	38.1	1.0	-51.0	-13.0	-38.0	
4.183	-10.9	V	3.0	36.5	1.0	-46.4	-13.0	-33.4	
6.692	-3.1	V	3.0	36.4	1.0	-38.6	-13.0	-25.6	
7.529	0.0	V	3.0	36.6	1.0	-35.6	-13.0	-22.6	
1.673	-13.2	H	3.0	38.1	1.0	-50.3	-13.0	-37.3	
6.692	-5.1	H	3.0	36.4	1.0	-40.6	-13.0	-27.6	
7.529	-3.9	H	3.0	36.6	1.0	-39.5	-13.0	-26.5	
8.365	2.1	H	3.0	36.8	1.0	-33.7	-13.0	-20.7	
<b>High Ch, 848.31MHz</b>									
1.697	-12.6	V	3.0	38.1	1.0	-49.7	-13.0	-36.7	
5.938	-7.2	V	3.0	36.3	1.0	-42.5	-13.0	-29.5	
6.787	-4.0	V	3.0	36.5	1.0	-39.4	-13.0	-26.4	
7.635	-2.9	V	3.0	36.6	1.0	-38.5	-13.0	-25.5	
1.697	-15.0	H	3.0	38.1	1.0	-52.1	-13.0	-39.1	
5.938	-7.4	H	3.0	36.3	1.0	-42.7	-13.0	-29.7	
6.787	-6.0	H	3.0	36.5	1.0	-41.4	-13.0	-28.4	
7.635	-0.8	H	3.0	36.6	1.0	-36.4	-13.0	-23.4	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									



**EUT (ON INDUCTIVE CHARGER)**

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/11/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(On Inductive Charger ) and Earphone							
<b>Mode:</b>		TX, CELL Band CDMA2000, EVDO Rev A							
<b>Chamber</b>		<b>Pre-amplifer</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 22		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 824.70MHz</b>									
1.649	1.8	V	3.0	38.2	1.0	-35.3	-13.0	-22.3	
2.474	-13.3	V	3.0	37.5	1.0	-49.8	-13.0	-36.8	
6.598	-5.3	V	3.0	36.4	1.0	-40.7	-13.0	-27.7	
7.422	-2.1	V	3.0	36.6	1.0	-37.7	-13.0	-24.7	
9.072	-1.0	V	3.0	37.0	1.0	-37.0	-13.0	-24.0	
1.649	0.6	H	3.0	38.2	1.0	-36.6	-13.0	-23.6	
2.474	-12.0	H	3.0	37.5	1.0	-48.5	-13.0	-35.5	
3.299	-12.1	H	3.0	37.1	1.0	-48.3	-13.0	-35.3	
6.597	-7.3	H	3.0	36.4	1.0	-42.7	-13.0	-29.7	
8.247	-5.0	H	3.0	36.8	1.0	-40.8	-13.0	-27.8	
<b>Mid Ch, 836.52MHz</b>									
1.673	2.1	V	3.0	38.1	1.0	-35.0	-13.0	-22.0	
2.510	-13.2	V	3.0	37.5	1.0	-49.6	-13.0	-36.6	
6.692	-4.1	V	3.0	36.4	1.0	-39.6	-13.0	-26.6	
7.529	-5.0	V	3.0	36.6	1.0	-40.6	-13.0	-27.6	
9.202	-4.8	V	3.0	37.0	1.0	-40.8	-13.0	-27.8	
1.673	72.8	H	3.0	38.1	1.0	35.7	-13.0	48.7	
2.510	-13.9	H	3.0	37.5	1.0	-50.3	-13.0	-37.3	
6.692	-7.1	H	3.0	36.4	1.0	-42.6	-13.0	-29.6	
7.529	-5.9	H	3.0	36.6	1.0	-41.5	-13.0	-28.5	
9.202	-4.8	H	3.0	37.0	1.0	-40.8	-13.0	-27.8	
<b>High Ch, 848.31MHz</b>									
1.697	0.4	V	3.0	38.1	1.0	-36.7	-13.0	-23.7	
2.545	-13.0	V	3.0	37.5	1.0	-49.5	-13.0	-36.5	
5.938	-4.2	V	3.0	36.3	1.0	-39.5	-13.0	-26.5	
6.787	-3.0	V	3.0	36.5	1.0	-38.4	-13.0	-25.4	
8.483	-2.8	V	3.0	36.8	1.0	-38.6	-13.0	-25.6	
1.697	0.0	H	3.0	38.1	1.0	-37.1	-13.0	-24.1	
2.545	-15.7	H	3.0	37.5	1.0	-52.1	-13.0	-39.1	
3.393	-12.9	H	3.0	37.1	1.0	-48.9	-13.0	-35.9	
7.635	-4.3	H	3.0	36.6	1.0	-39.9	-13.0	-26.9	
8.483	-1.7	H	3.0	36.8	1.0	-37.6	-13.0	-24.6	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**GPRS (Cellular Band)**

**EUT (STANDARD COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Standard Cover) with AC Adapter and Earphone							
<b>Mode:</b>		TX, CELL BAND GPRS							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 22		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (824.2MHz)</b>									
1.648	8.9	V	3.0	37.4	1.0	-27.5	-13.0	-14.5	
2.473	0.6	V	3.0	36.4	1.0	-34.8	-13.0	-21.8	
3.297	0.6	V	3.0	35.8	1.0	-34.2	-13.0	-21.2	
6.594	-6.1	V	3.0	34.8	1.0	-39.9	-13.0	-26.9	
8.242	-2.8	V	3.0	35.1	1.0	-36.9	-13.0	-23.9	
9.066	-4.3	V	3.0	35.2	1.0	-38.5	-13.0	-25.5	
1.648	15.6	H	3.0	37.4	1.0	-20.7	-13.0	-7.7	
2.473	-6.0	H	3.0	36.4	1.0	-41.4	-13.0	-28.4	
3.297	-5.2	H	3.0	35.8	1.0	-40.0	-13.0	-27.0	
7.418	-5.9	H	3.0	34.9	1.0	-39.8	-13.0	-26.8	
9.066	0.1	H	3.0	35.2	1.0	-34.1	-13.0	-21.1	
<b>Mid Ch, (836.6MHz)</b>									
1.673	4.1	V	3.0	37.3	1.0	-32.2	-13.0	-19.2	
2.510	-0.2	V	3.0	36.4	1.0	-35.6	-13.0	-22.6	
3.346	0.8	V	3.0	35.8	1.0	-34.0	-13.0	-21.0	
6.693	-3.9	V	3.0	34.8	1.0	-37.7	-13.0	-24.7	
7.529	-3.7	V	3.0	34.9	1.0	-37.6	-13.0	-24.6	
8.366	-3.1	V	3.0	35.1	1.0	-37.2	-13.0	-24.2	
1.673	7.9	H	3.0	37.3	1.0	-28.5	-13.0	-15.5	
2.510	-8.8	H	3.0	36.4	1.0	-44.2	-13.0	-31.2	
3.346	-6.4	H	3.0	35.8	1.0	-41.2	-13.0	-28.2	
7.529	4.7	H	3.0	34.9	1.0	-38.7	-13.0	-25.7	
8.366	-4.7	H	3.0	35.1	1.0	-38.8	-13.0	-25.8	
<b>High Ch, (848.8MHz)</b>									
1.698	2.4	V	3.0	37.3	1.0	-33.9	-13.0	-20.9	
2.546	-1.1	V	3.0	36.3	1.0	-36.5	-13.0	-23.5	
3.395	-3.1	V	3.0	35.7	1.0	-37.8	-13.0	-24.8	
8.488	-6.5	V	3.0	35.1	1.0	-40.6	-13.0	-27.6	
1.698	6.1	H	3.0	37.3	1.0	-30.2	-13.0	-17.2	
2.546	-9.6	H	3.0	36.3	1.0	-45.0	-13.0	-32.0	
3.395	-10.5	H	3.0	35.7	1.0	-45.2	-13.0	-32.2	
7.639	-4.6	H	3.0	35.0	1.0	-38.6	-13.0	-25.6	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (INDUCTIVE COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Inductive Cover) with AC Adapter and Earphone							
<b>Mode:</b>		TX, CELL BAND GPRS							
<b>Chamber</b>		<b>Pre-amplifer</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 22		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (824.2MHz)</b>									
1.648	6.9	V	3.0	37.4	1.0	-29.5	-13.0	-16.5	
2.473	1.6	V	3.0	36.4	1.0	-33.8	-13.0	-20.8	
3.297	-1.4	V	3.0	35.8	1.0	-36.2	-13.0	-23.2	
6.594	-6.1	V	3.0	34.8	1.0	-39.9	-13.0	-26.9	
7.418	-6.8	V	3.0	34.9	1.0	-40.8	-13.0	-27.8	
9.066	-4.8	V	3.0	35.2	1.0	-39.0	-13.0	-26.0	
1.648	12.6	H	3.0	37.4	1.0	-23.7	-13.0	-10.7	
2.473	-5.0	H	3.0	36.4	1.0	-40.4	-13.0	-27.4	
3.297	-6.6	H	3.0	35.8	1.0	-41.4	-13.0	-28.4	
8.242	-2.9	H	3.0	35.1	1.0	-36.9	-13.0	-23.9	
9.066	-3.9	H	3.0	35.2	1.0	-38.1	-13.0	-25.1	
<b>Mid Ch, (836.6MHz)</b>									
1.673	3.1	V	3.0	37.3	1.0	-33.2	-13.0	-20.2	
2.510	1.8	V	3.0	36.4	1.0	-33.6	-13.0	-20.6	
3.346	-1.2	V	3.0	35.8	1.0	-36.0	-13.0	-23.0	
6.693	-6.9	V	3.0	34.8	1.0	-40.7	-13.0	-27.7	
8.366	-5.6	V	3.0	35.1	1.0	-39.7	-13.0	-26.7	
1.673	4.9	H	3.0	37.3	1.0	-31.5	-13.0	-18.5	
2.510	-7.8	H	3.0	36.4	1.0	-43.2	-13.0	-30.2	
3.346	-8.4	H	3.0	35.8	1.0	-43.2	-13.0	-30.2	
7.529	-3.7	H	3.0	34.9	1.0	-37.7	-13.0	-24.7	
8.366	-5.7	H	3.0	35.1	1.0	-39.8	-13.0	-26.8	
<b>High Ch, (848.8MHz)</b>									
1.698	2.4	V	3.0	37.3	1.0	-33.9	-13.0	-20.9	
2.546	-0.1	V	3.0	36.3	1.0	-35.5	-13.0	-22.5	
3.395	-6.1	V	3.0	35.7	1.0	-40.8	-13.0	-27.8	
8.488	-4.5	V	3.0	35.1	1.0	-38.6	-13.0	-25.6	
1.698	5.1	H	3.0	37.3	1.0	-31.2	-13.0	-18.2	
2.546	-7.6	H	3.0	36.3	1.0	-43.0	-13.0	-30.0	
3.395	-10.3	H	3.0	35.7	1.0	-45.0	-13.0	-32.0	
7.639	-1.6	H	3.0	35.0	1.0	-35.6	-13.0	-22.6	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									



**EUT (ON INDUCTIVE CHARGER)**

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Inductive Charger) and Earphone							
<b>Mode:</b>		TX, CELL BAND GPRS							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 22		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (824.2MHz)</b>									
1.648	3.9	V	3.0	37.4	1.0	-32.5	-13.0	-19.5	
2.473	0.6	V	3.0	36.4	1.0	-34.8	-13.0	-21.8	
3.297	1.1	V	3.0	35.8	1.0	-33.7	-13.0	-20.7	
6.594	-7.1	V	3.0	34.8	1.0	-40.9	-13.0	-27.9	
8.242	-2.8	V	3.0	35.1	1.0	-36.9	-13.0	-23.9	
9.066	-4.8	V	3.0	35.2	1.0	-39.0	-13.0	-26.0	
1.648	0.6	H	3.0	37.4	1.0	-35.7	-13.0	-22.7	
2.473	2.0	H	3.0	36.4	1.0	-33.4	-13.0	-20.4	
3.297	3.4	H	3.0	35.8	1.0	-31.4	-13.0	-18.4	
7.418	-3.9	H	3.0	34.9	1.0	-37.8	-13.0	-24.8	
<b>Mid Ch, (836.6MHz)</b>									
1.673	2.1	V	3.0	37.3	1.0	-34.2	-13.0	-21.2	
2.510	1.8	V	3.0	36.4	1.0	-33.6	-13.0	-20.6	
3.346	-1.2	V	3.0	35.8	1.0	-36.0	-13.0	-23.0	
7.529	-3.7	V	3.0	34.9	1.0	-37.6	-13.0	-24.6	
1.673	-3.1	H	3.0	37.3	1.0	-39.5	-13.0	-26.5	
2.510	2.2	H	3.0	36.4	1.0	-33.2	-13.0	-20.2	
3.346	-3.4	H	3.0	35.8	1.0	-38.2	-13.0	-25.2	
<b>High Ch, (848.8MHz)</b>									
1.698	-2.6	V	3.0	37.3	1.0	-38.9	-13.0	-25.9	
2.546	0.9	V	3.0	36.3	1.0	-34.5	-13.0	-21.5	
3.395	-4.1	V	3.0	35.7	1.0	-38.8	-13.0	-25.8	
7.639	-5.6	V	3.0	35.0	1.0	-39.5	-13.0	-26.5	
1.698	-2.9	H	3.0	37.3	1.0	-39.2	-13.0	-26.2	
2.546	3.4	H	3.0	36.3	1.0	-32.0	-13.0	-19.0	
3.395	-4.3	H	3.0	35.7	1.0	-39.0	-13.0	-26.0	
7.639	-4.6	H	3.0	35.0	1.0	-38.6	-13.0	-25.6	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EGPRS (Cellular Band)**

**EUT (STANDARD COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/17/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Standard Cover) with AC Adapter and Earphone							
<b>Mode:</b>		TX, CELL BAND EGPRS							
<b>Chamber</b>		<b>Pre-amplifer</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 22		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (824.2MHz)</b>									
1.648	3.8	V	3.0	38.2	1.0	-33.3	-13.0	-20.3	
2.473	-2.3	V	3.0	37.5	1.0	-38.8	-13.0	-25.8	
3.297	-1.0	V	3.0	37.1	1.0	-37.1	-13.0	-24.1	
6.594	-7.3	V	3.0	36.4	1.0	-42.7	-13.0	-29.7	
8.242	-4.6	V	3.0	36.8	1.0	-40.4	-13.0	-27.4	
1.648	1.5	H	3.0	38.2	1.0	-35.6	-13.0	-22.6	
2.473	-8.0	H	3.0	37.5	1.0	-44.5	-13.0	-31.5	
3.297	-8.1	H	3.0	37.1	1.0	-44.3	-13.0	-31.3	
6.594	-8.3	H	3.0	36.4	1.0	-43.7	-13.0	-30.7	
7.418	-5.1	H	3.0	36.6	1.0	-40.7	-13.0	-27.7	
<b>Mid Ch, (836.6MHz)</b>									
1.673	7.1	V	3.0	38.1	1.0	-30.0	-13.0	-17.0	
2.510	-3.1	V	3.0	37.5	1.0	-39.6	-13.0	-26.6	
3.346	-0.9	V	3.0	37.1	1.0	-37.0	-13.0	-24.0	
6.693	-6.1	V	3.0	36.4	1.0	-41.6	-13.0	-28.6	
7.529	-6.0	V	3.0	36.6	1.0	-41.6	-13.0	-28.6	
1.673	-1.2	H	3.0	38.1	1.0	-38.3	-13.0	-25.3	
2.510	-9.9	H	3.0	37.5	1.0	-46.3	-13.0	-33.3	
3.346	-9.0	H	3.0	37.1	1.0	-45.1	-13.0	-32.1	
6.693	-6.1	H	3.0	36.4	1.0	-41.6	-13.0	-28.6	
<b>High Ch, (848.8MHz)</b>									
1.698	4.4	V	3.0	38.1	1.0	-32.7	-13.0	-19.7	
2.546	-3.0	V	3.0	37.5	1.0	-39.5	-13.0	-26.5	
3.395	-7.8	V	3.0	37.1	1.0	-43.8	-13.0	-30.8	
7.639	-4.9	V	3.0	36.6	1.0	-40.5	-13.0	-27.5	
1.698	-2.0	H	3.0	38.1	1.0	-39.1	-13.0	-26.1	
2.546	-16.6	H	3.0	37.5	1.0	-53.1	-13.0	-40.1	
3.395	-10.1	H	3.0	37.1	1.0	-46.1	-13.0	-33.1	
7.639	-5.8	H	3.0	36.6	1.0	-41.4	-13.0	-28.4	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (INDUCTIVE COVER)**

**Compliance Certification Services**  
**Above 1GHz High Frequency Substitution Measurement**

**Company:** LG  
**Project #:** 12U14331  
**Date:** 04/17/12  
**Test Engineer:** Chin Pang  
**Configuration:** EUT(Inductive Cover) with AC Adapter and Earphone  
**Mode:** TX, CELL BAND EGPRS

Chamber

Pre-amplifier

Filter

Limit

5m Chamber A

T34 8449B

Filter 1

Part 22

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (824.2MHz)</b>									
1.648	6.8	V	3.0	37.4	1.0	-29.6	-13.0	-16.6	
2.473	-1.3	V	3.0	36.4	1.0	-36.7	-13.0	-23.7	
3.297	-2.0	V	3.0	35.8	1.0	-36.8	-13.0	-23.8	
6.594	-7.3	V	3.0	34.8	1.0	-41.1	-13.0	-28.1	
7.418	-8.2	V	3.0	34.9	1.0	-42.1	-13.0	-29.1	
1.648	0.5	H	3.0	37.4	1.0	-35.8	-13.0	-22.8	
2.473	-8.0	H	3.0	36.4	1.0	-43.4	-13.0	-30.4	
3.297	-6.1	H	3.0	35.8	1.0	-40.9	-13.0	-27.9	
5.769	-8.7	H	3.0	34.7	1.0	-42.4	-13.0	-29.4	
7.418	-2.1	H	3.0	34.9	1.0	-36.0	-13.0	-23.0	
<b>Mid Ch, (836.6MHz)</b>									
1.673	5.1	V	3.0	37.3	1.0	-31.2	-13.0	-18.2	
2.510	-1.1	V	3.0	36.4	1.0	-36.5	-13.0	-23.5	
3.346	-0.9	V	3.0	35.8	1.0	-35.6	-13.0	-22.6	
5.856	-8.3	V	3.0	34.7	1.0	-42.0	-13.0	-29.0	
6.693	-9.1	V	3.0	34.8	1.0	-42.9	-13.0	-29.9	
1.673	-3.2	H	3.0	37.3	1.0	-39.6	-13.0	-26.6	
2.510	-6.9	H	3.0	36.4	1.0	-42.2	-13.0	-29.2	
3.346	-5.0	H	3.0	35.8	1.0	-39.8	-13.0	-26.8	
5.856	-7.5	H	3.0	34.7	1.0	-41.3	-13.0	-28.3	
7.529	-2.9	H	3.0	34.9	1.0	-36.9	-13.0	-23.9	
<b>High Ch, (848.8MHz)</b>									
1.698	2.4	V	3.0	37.3	1.0	-33.9	-13.0	-20.9	
2.546	-2.0	V	3.0	36.3	1.0	-37.4	-13.0	-24.4	
3.395	-5.8	V	3.0	35.7	1.0	-40.5	-13.0	-27.5	
7.639	-5.9	V	3.0	35.0	1.0	-39.8	-13.0	-26.8	
1.698	-2.0	H	3.0	37.3	1.0	-38.3	-13.0	-25.3	
2.546	-9.6	H	3.0	36.3	1.0	-45.0	-13.0	-32.0	
3.395	-4.9	H	3.0	35.7	1.0	-39.6	-13.0	-26.6	
7.639	-2.8	H	3.0	35.0	1.0	-36.7	-13.0	-23.7	

Rev. 03.03.09  
 Note: No other emissions were detected above the system noise floor.

**EUT (ON INDUCTIVE CHARGER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/17/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(On Inductive Charger) and Earphone							
<b>Mode:</b>		TX, CELL BAND EGPRS							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 22		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	ERP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (824.2MHz)</b>									
1.648	-0.2	V	3.0	38.2	1.0	-37.3	-13.0	-24.3	
2.473	0.7	V	3.0	37.5	1.0	-35.8	-13.0	-22.8	
3.297	0.0	V	3.0	37.1	1.0	-36.1	-13.0	-23.1	
6.594	7.3	V	3.0	36.4	1.0	-42.7	-13.0	-29.7	
7.418	-3.2	V	3.0	36.6	1.0	-38.7	-13.0	-25.7	
1.648	-1.5	H	3.0	38.2	1.0	-38.6	-13.0	-25.6	
2.473	1.0	H	3.0	37.5	1.0	-35.5	-13.0	-22.5	
3.297	-1.1	H	3.0	37.1	1.0	-37.3	-13.0	-24.3	
6.594	-8.3	H	3.0	36.4	1.0	-43.7	-13.0	-30.7	
7.418	-5.1	H	3.0	36.6	1.0	-40.7	-13.0	-27.7	
<b>Mid Ch, (836.6MHz)</b>									
1.673	-2.9	V	3.0	38.1	1.0	-40.0	-13.0	-27.0	
2.510	0.9	V	3.0	37.5	1.0	-35.6	-13.0	-22.6	
3.346	-0.9	V	3.0	37.1	1.0	-37.0	-13.0	-24.0	
6.693	-4.1	V	3.0	36.4	1.0	-39.6	-13.0	-26.6	
7.529	-3.0	V	3.0	36.6	1.0	-38.6	-13.0	-25.6	
1.673	-6.2	H	3.0	38.1	1.0	-43.3	-13.0	-30.3	
2.510	-1.9	H	3.0	37.5	1.0	-38.3	-13.0	-25.3	
3.346	-1.3	H	3.0	37.1	1.0	-37.4	-13.0	-24.4	
6.693	-5.1	H	3.0	36.4	1.0	-40.6	-13.0	-27.6	
7.529	-4.9	H	3.0	36.6	1.0	-40.5	-13.0	-27.5	
<b>High Ch, (848.8MHz)</b>									
1.698	-9.6	V	3.0	38.1	1.0	-46.7	-13.0	-33.7	
2.546	0.0	V	3.0	37.5	1.0	-36.5	-13.0	-23.5	
3.395	-1.8	V	3.0	37.1	1.0	-37.8	-13.0	-24.8	
5.942	-8.2	V	3.0	36.3	1.0	-43.5	-13.0	-30.5	
7.639	-4.9	V	3.0	36.6	1.0	-40.5	-13.0	-27.5	
1.698	-11.0	H	3.0	38.1	1.0	-48.1	-13.0	-35.1	
2.546	0.4	H	3.0	37.5	1.0	-36.1	-13.0	-23.1	
3.395	-1.9	H	3.0	37.1	1.0	-37.9	-13.0	-24.9	
5.942	-7.4	H	3.0	36.3	1.0	-42.7	-13.0	-29.7	
7.639	-6.8	H	3.0	36.6	1.0	-42.4	-13.0	-29.4	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**1xRTT (PCS Band)**

**EUT (STANDARD COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/09/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (Standard Cover) with Headset and AC Adapter							
<b>Mode:</b>		TX, PCS Band CDMA Mode							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1851.25MHz</b>									
3.703	-0.1	V	3.0	36.8	1.0	-35.9	-13.0	-22.9	
5.554	5.3	V	3.0	36.3	1.0	-30.0	-13.0	-17.0	
7.405	-6.2	V	3.0	36.6	1.0	-41.7	-13.0	-28.7	
9.256	-5.8	V	3.0	37.0	1.0	-41.8	-13.0	-28.8	
3.703	-1.0	H	3.0	36.8	1.0	-36.8	-13.0	-23.8	
5.554	0.9	H	3.0	36.3	1.0	-34.3	-13.0	-21.3	
7.405	-2.1	H	3.0	36.6	1.0	-37.7	-13.0	-24.7	
<b>Mid Ch, 1880.00MHz</b>									
3.760	1.1	V	3.0	36.8	1.0	-34.7	-13.0	-21.7	
5.640	6.4	V	3.0	36.3	1.0	-28.9	-13.0	-15.9	
7.520	-5.0	V	3.0	36.6	1.0	-40.6	-13.0	-27.6	
11.280	-1.5	V	3.0	36.8	1.0	-37.4	-13.0	-24.4	
3.760	0.2	H	3.0	36.8	1.0	-35.6	-13.0	-22.6	
5.640	0.1	H	3.0	36.3	1.0	-35.2	-13.0	-22.2	
7.520	-3.9	H	3.0	36.6	1.0	-39.5	-13.0	-26.5	
<b>High Ch, 1908.75MHz</b>									
3.818	3.2	V	3.0	36.7	1.0	-32.5	-13.0	-19.5	
5.726	4.5	V	3.0	36.3	1.0	-30.8	-13.0	-17.8	
7.635	-3.9	V	3.0	36.6	1.0	-39.5	-13.0	-26.5	
11.453	-2.3	V	3.0	36.8	1.0	-38.1	-13.0	-25.1	
3.818	1.3	H	3.0	36.7	1.0	-34.4	-13.0	-21.4	
5.726	0.2	H	3.0	36.3	1.0	-35.1	-13.0	-22.1	
7.635	-3.8	H	3.0	36.6	1.0	-39.4	-13.0	-26.4	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (INDUCTIVE COVER)**

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/09/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (Inductive Cover) with Headset and AC Adapter							
<b>Mode:</b>		TX, PCS Band CDMA Mode							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1851.25MHz</b>									
3.703	1.9	V	3.0	36.8	1.0	-33.9	-13.0	-20.9	
5.554	3.3	V	3.0	36.3	1.0	-32.0	-13.0	-19.0	
7.405	-5.2	V	3.0	36.6	1.0	-40.7	-13.0	-27.7	
11.107	-1.7	V	3.0	36.9	1.0	-37.6	-13.0	-24.6	
3.703	-3.0	H	3.0	36.8	1.0	-38.8	-13.0	-25.8	
5.554	-0.1	H	3.0	36.3	1.0	-35.3	-13.0	-22.3	
7.405	-5.1	H	3.0	36.6	1.0	-40.7	-13.0	-27.7	
<b>Mid Ch, 1880.00MHz</b>									
3.760	0.1	V	3.0	36.8	1.0	-35.7	-13.0	-22.7	
5.640	1.4	V	3.0	36.3	1.0	-33.9	-13.0	-20.9	
7.520	-4.0	V	3.0	36.6	1.0	-39.6	-13.0	-26.6	
3.760	-9.8	H	3.0	36.8	1.0	-45.6	-13.0	-32.6	
5.640	2.1	H	3.0	36.3	1.0	-33.2	-13.0	-20.2	
7.520	5.1	H	3.0	36.6	1.0	-30.5	-13.0	-17.5	
<b>High Ch, 1908.75MHz</b>									
3.818	5.2	V	3.0	36.7	1.0	-30.5	-13.0	-17.5	
5.726	4.5	V	3.0	36.3	1.0	-30.8	-13.0	-17.8	
7.635	-1.9	V	3.0	36.6	1.0	-37.5	-13.0	-24.5	
3.818	0.3	H	3.0	36.7	1.0	-35.4	-13.0	-22.4	
5.726	3.2	H	3.0	36.3	1.0	-32.1	-13.0	-19.1	
7.635	-5.8	H	3.0	36.6	1.0	-41.4	-13.0	-28.4	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									



**EUT (ON INDUCTIVE CHARGER)**

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/09/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (On Inductive Charger) and Headset							
<b>Mode:</b>		TX, PCS Band CDMA Mode							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1851.25MHz</b>									
3.703	-1.1	V	3.0	36.8	1.0	-36.9	-13.0	-23.9	
5.554	4.3	V	3.0	36.3	1.0	-31.0	-13.0	-18.0	
7.405	-5.2	V	3.0	36.6	1.0	-40.7	-13.0	-27.7	
9.256	-3.8	V	3.0	37.0	1.0	-39.8	-13.0	-26.8	
3.703	5.0	H	3.0	36.8	1.0	-30.8	-13.0	-17.8	
5.554	3.9	H	3.0	36.3	1.0	-31.3	-13.0	-18.3	
7.405	-4.1	H	3.0	36.6	1.0	-39.7	-13.0	-26.7	
<b>Mid Ch, 1880.00MHz</b>									
3.760	1.1	V	3.0	36.8	1.0	-34.7	-13.0	-21.7	
5.640	3.4	V	3.0	36.3	1.0	-31.9	-13.0	-18.9	
7.520	-5.0	V	3.0	36.6	1.0	-40.6	-13.0	-27.6	
9.400	-4.6	V	3.0	37.0	1.0	-40.6	-13.0	-27.6	
3.760	3.2	H	3.0	36.8	1.0	-32.6	-13.0	-19.6	
5.640	3.1	H	3.0	36.3	1.0	-32.2	-13.0	-19.2	
7.520	-3.9	H	3.0	36.6	1.0	-39.5	-13.0	-26.5	
<b>High Ch, 1908.75MHz</b>									
3.818	3.2	V	3.0	36.7	1.0	-32.5	-13.0	-19.5	
5.726	-2.5	V	3.0	36.3	1.0	-37.8	-13.0	-24.8	
7.635	-4.9	V	3.0	36.6	1.0	-40.5	-13.0	-27.5	
9.544	-5.4	V	3.0	37.1	1.0	-41.5	-13.0	-28.5	
3.818	5.3	H	3.0	36.7	1.0	-30.4	-13.0	-17.4	
5.726	0.2	H	3.0	36.3	1.0	-35.1	-13.0	-22.1	
7.635	-0.8	H	3.0	36.6	1.0	-36.4	-13.0	-23.4	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**CDMA2000 1xEV-DO Revision A (Rev. A) (PCS Band)**

**EUT (STANDARD COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/09/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (Standard Cover) with AC Adapter and Headset							
<b>Mode:</b>		TX, PCS Band CDMA2000, EVDO Rev A							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1851.25MHz</b>									
3.703	2.9	V	3.0	36.8	1.0	-32.9	-13.0	-19.9	
5.554	1.3	V	3.0	36.3	1.0	-34.0	-13.0	-21.0	
7.405	-4.2	V	3.0	36.6	1.0	-39.7	-13.0	-26.7	
9.256	-0.8	V	3.0	37.0	1.0	-36.8	-13.0	-23.8	
11.107	0.3	V	3.0	36.9	1.0	-35.6	-13.0	-22.6	
3.703	0.0	H	3.0	36.8	1.0	-35.8	-13.0	-22.8	
5.554	1.9	H	3.0	36.3	1.0	-33.3	-13.0	-20.3	
7.405	-4.1	H	3.0	36.6	1.0	-39.7	-13.0	-26.7	
9.256	-0.7	H	3.0	37.0	1.0	-36.8	-13.0	-23.8	
<b>Mid Ch, 1880.00MHz</b>									
3.760	3.1	V	3.0	36.8	1.0	-32.7	-13.0	-19.7	
5.640	-1.6	V	3.0	36.3	1.0	-36.9	-13.0	-23.9	
9.400	-3.6	V	3.0	37.0	1.0	-39.6	-13.0	-26.6	
9.400	-2.6	V	3.0	37.0	1.0	-38.6	-13.0	-25.6	
3.760	0.2	H	3.0	36.8	1.0	-35.6	-13.0	-22.6	
5.640	-0.9	H	3.0	36.3	1.0	-36.2	-13.0	-23.2	
7.520	-5.9	H	3.0	36.6	1.0	-41.5	-13.0	-28.5	
9.400	-1.6	H	3.0	37.0	1.0	-37.6	-13.0	-24.6	
<b>High Ch, 1908.75MHz</b>									
3.818	5.2	V	3.0	36.7	1.0	-30.5	-13.0	-17.5	
5.726	-2.5	V	3.0	36.3	1.0	-37.8	-13.0	-24.8	
11.453	-0.3	V	3.0	36.8	1.0	-36.1	-13.0	-23.1	
3.818	2.3	H	3.0	36.7	1.0	-33.4	-13.0	-20.4	
5.726	-1.8	H	3.0	36.3	1.0	-37.1	-13.0	-24.1	
11.453	-2.3	H	3.0	36.8	1.0	-38.0	-13.0	-25.0	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									



**EUT (INDUCTIVE COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/09/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (Inductive Cover) with AC Adapter and Headset							
<b>Mode:</b>		TX, PCS Band CDMA2000, EVDO Rev A							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1851.25MHz</b>									
3.703	9.9	V	3.0	36.8	1.0	-25.9	-13.0	-12.9	
5.554	-0.7	V	3.0	36.3	1.0	-36.0	-13.0	-23.0	
7.405	-4.2	V	3.0	36.6	1.0	-39.7	-13.0	-26.7	
11.108	4.3	V	3.0	36.9	1.0	-31.6	-13.0	-18.6	
3.703	1.0	H	3.0	36.8	1.0	-34.8	-13.0	-21.8	
5.554	-0.1	H	3.0	36.3	1.0	-35.3	-13.0	-22.3	
7.405	1.9	H	3.0	36.6	1.0	-33.7	-13.0	-20.7	
11.108	6.9	H	3.0	36.9	1.0	-29.0	-13.0	-16.0	
<b>Mid Ch, 1880.00MHz</b>									
3.760	8.1	V	3.0	36.8	1.0	-27.7	-13.0	-14.7	
5.640	4.4	V	3.0	36.3	1.0	-30.9	-13.0	-17.9	
7.520	-7.0	V	3.0	36.6	1.0	-42.6	-13.0	-29.6	
11.280	1.5	V	3.0	36.8	1.0	-34.4	-13.0	-21.4	
3.760	5.2	H	3.0	36.8	1.0	-30.6	-13.0	-17.6	
5.640	1.1	H	3.0	36.3	1.0	-34.2	-13.0	-21.2	
7.520	1.1	H	3.0	36.6	1.0	-34.5	-13.0	-21.5	
11.280	3.8	H	3.0	36.8	1.0	-32.0	-13.0	-19.0	
<b>High Ch, 1908.75MHz</b>									
3.818	14.2	V	3.0	36.7	1.0	-21.5	-13.0	-8.5	
5.726	2.5	V	3.0	36.3	1.0	-32.8	-13.0	-19.8	
7.635	-0.9	V	3.0	36.6	1.0	-36.5	-13.0	-23.5	
9.544	-2.4	V	3.0	37.1	1.0	-38.5	-13.0	-25.5	
11.453	4.7	V	3.0	36.8	1.0	-31.1	-13.0	-18.1	
3.818	7.3	H	3.0	36.7	1.0	-28.4	-13.0	-15.4	
5.726	-0.8	H	3.0	36.3	1.0	-36.1	-13.0	-23.1	
11.453	6.7	H	3.0	36.8	1.0	-29.0	-13.0	-16.0	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (ON INDUCTIVE CHARGER)**

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/09/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (On Inductive Charger) and Headset							
<b>Mode:</b>		TX, PCS Band CDMA2000, EVDO Rev A							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
5m Chamber A		T144 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1851.25MHz</b>									
3.703	-5.1	V	3.0	36.8	1.0	-40.9	-13.0	-27.9	
5.554	-3.7	V	3.0	36.3	1.0	-39.0	-13.0	-26.0	
7.405	-10.2	V	3.0	36.6	1.0	-45.7	-13.0	-32.7	
3.703	0.0	H	3.0	36.8	1.0	-35.8	-13.0	-22.8	
5.554	-0.1	H	3.0	36.3	1.0	-35.3	-13.0	-22.3	
7.405	-9.1	H	3.0	36.6	1.0	-44.7	-13.0	-31.7	
<b>Mid Ch, 1880.00MHz</b>									
3.760	1.1	V	3.0	36.8	1.0	-34.7	-13.0	-21.7	
5.640	1.4	V	3.0	36.3	1.0	-33.9	-13.0	-20.9	
7.520	-8.0	V	3.0	36.6	1.0	-43.6	-13.0	-30.6	
3.760	2.2	H	3.0	36.8	1.0	-33.6	-13.0	-20.6	
5.640	-0.9	H	3.0	36.3	1.0	-36.2	-13.0	-23.2	
7.520	-6.9	H	3.0	36.6	1.0	-42.5	-13.0	-29.5	
<b>High Ch, 1908.75MHz</b>									
3.818	3.2	V	3.0	36.7	1.0	-32.5	-13.0	-19.5	
5.726	0.5	V	3.0	36.3	1.0	-34.8	-13.0	-21.8	
7.635	-7.9	V	3.0	36.6	1.0	-43.5	-13.0	-30.5	
3.818	3.3	H	3.0	36.7	1.0	-32.4	-13.0	-19.4	
5.726	-3.8	H	3.0	36.3	1.0	-39.1	-13.0	-26.1	
7.635	-6.8	H	3.0	36.6	1.0	-42.4	-13.0	-29.4	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**GPRS (PCS Band)**

**EUT (STANDARD COVER)**

**Compliance Certification Services**  
**Above 1GHz High Frequency Substitution Measurement**

**Company:** LG  
**Project #:** 12U14331  
**Date:** 04/13/12  
**Test Engineer:** Chin Pang  
**Configuration:** EUT (Standard Cover) with AC Adapter and Earphone  
**Mode:** TX, PCS BAND, GPRS

Chamber

3m Chamber

Pre-amplifier

T34 8449B

Filter

Filter 1

Limit

Part 24

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (1850.2MHz)</b>									
3.700	8.9	V	3.0	35.4	1.0	-25.5	-13.0	-12.5	
5.551	12.2	V	3.0	34.7	1.0	-21.6	-13.0	-8.6	
7.401	4.1	V	3.0	34.9	1.0	-29.8	-13.0	-16.8	
3.700	4.7	H	3.0	35.4	1.0	-29.7	-13.0	-16.7	
5.551	6.7	H	3.0	34.7	1.0	-27.0	-13.0	-14.0	
7.401	3.1	H	3.0	34.9	1.0	-30.8	-13.0	-17.8	
<b>Mid Ch, (1880.0MHz)</b>									
3.760	9.1	V	3.0	35.3	1.0	-25.2	-13.0	-12.2	
5.640	12.3	V	3.0	34.7	1.0	-21.4	-13.0	-8.4	
7.520	2.3	V	3.0	34.9	1.0	-31.6	-13.0	-18.6	
3.760	6.8	H	3.0	35.3	1.0	-27.5	-13.0	-14.5	
5.640	10.9	H	3.0	34.7	1.0	-22.8	-13.0	-9.8	
7.520	2.3	H	3.0	34.9	1.0	-31.7	-13.0	-18.7	
<b>High Ch, (1909.8MHz)</b>									
3.820	14.3	V	3.0	35.3	1.0	-20.0	-13.0	-7.0	
5.729	12.5	V	3.0	34.7	1.0	-21.3	-13.0	-8.3	
7.639	-1.6	V	3.0	35.0	1.0	-35.5	-13.0	-22.5	
3.820	10.0	H	3.0	35.3	1.0	-24.3	-13.0	-11.3	
5.729	10.6	H	3.0	34.7	1.0	-23.2	-13.0	-10.2	
7.639	-1.6	H	3.0	35.0	1.0	-35.6	-13.0	-22.6	

Rev. 03.03.09  
 Note: No other emissions were detected above the system noise floor.

**EUT (INDUCTIVE COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (Inductive Cover) with AC Adapter and Earphone							
<b>Mode:</b>		TX, PCS BAND, GPRS							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (1850.2MHz)</b>									
3.700	9.9	V	3.0	35.4	1.0	-24.5	-13.0	-11.5	
5.551	13.2	V	3.0	34.7	1.0	-20.6	-13.0	-7.6	
7.401	1.1	V	3.0	34.9	1.0	-32.8	-13.0	-19.8	
3.700	0.7	H	3.0	35.4	1.0	-33.7	-13.0	-20.7	
5.551	8.7	H	3.0	34.7	1.0	-25.0	-13.0	-12.0	
7.401	-0.9	H	3.0	34.9	1.0	-34.8	-13.0	-21.8	
<b>Mid Ch, (1880.0MHz)</b>									
3.760	11.1	V	3.0	35.3	1.0	-23.2	-13.0	-10.2	
5.640	16.3	V	3.0	34.7	1.0	-17.4	-13.0	4.4	
7.520	0.3	V	3.0	34.9	1.0	-33.6	-13.0	-20.6	
3.760	10.8	H	3.0	35.3	1.0	-23.5	-13.0	-10.5	
5.640	16.4	H	3.0	34.7	1.0	-17.3	-13.0	-4.3	
7.520	1.3	H	3.0	34.9	1.0	-32.7	-13.0	-19.7	
<b>High Ch, (1909.8MHz)</b>									
3.820	12.3	V	3.0	35.3	1.0	-22.0	-13.0	-9.0	
5.729	15.5	V	3.0	34.7	1.0	-18.3	-13.0	-5.3	
7.639	-0.6	V	3.0	35.0	1.0	-34.5	-13.0	-21.5	
3.820	6.0	H	3.0	35.3	1.0	-28.3	-13.0	-15.3	
5.729	13.1	H	3.0	34.7	1.0	-20.7	-13.0	-7.7	
7.639	-3.6	H	3.0	35.0	1.0	-37.6	-13.0	-24.6	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (ON INDUCTIVE CHARGER)**

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (On Inductive Charger) and Earphone							
<b>Mode:</b>		TX, PCS BAND, GPRS							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (1850.2MHz)</b>									
3.700	9.9	V	3.0	35.4	1.0	-24.5	-13.0	-11.5	
5.551	9.2	V	3.0	34.7	1.0	-24.6	-13.0	-11.6	
7.401	-0.9	V	3.0	34.9	1.0	-34.8	-13.0	-21.8	
3.700	10.7	H	3.0	35.4	1.0	-23.7	-13.0	-10.7	
5.551	4.7	H	3.0	34.7	1.0	-29.0	-13.0	-16.0	
7.401	-1.9	H	3.0	34.9	1.0	-35.8	-13.0	-22.8	
<b>Mid Ch, (1880.0MHz)</b>									
3.760	13.1	V	3.0	35.3	1.0	-21.2	-13.0	-8.2	
5.640	14.3	V	3.0	34.7	1.0	-19.4	-13.0	-6.4	
7.520	-0.7	V	3.0	34.9	1.0	-34.6	-13.0	-21.6	
3.760	12.8	H	3.0	35.3	1.0	-21.5	-13.0	-8.5	
5.640	11.9	H	3.0	34.7	1.0	-21.8	-13.0	-8.8	
7.520	-0.7	H	3.0	34.9	1.0	-34.7	-13.0	-21.7	
<b>High Ch, (1909.8MHz)</b>									
3.820	7.3	V	3.0	35.3	1.0	-27.0	-13.0	-14.0	
5.729	8.5	V	3.0	34.7	1.0	-25.3	-13.0	-12.3	
7.639	-3.6	V	3.0	35.0	1.0	-37.5	-13.0	-24.5	
3.820	12.2	H	3.0	35.3	1.0	-22.1	-13.0	-9.1	
5.729	10.1	H	3.0	34.7	1.0	-23.7	-13.0	-10.7	
7.639	-3.6	H	3.0	35.0	1.0	-37.6	-13.0	-24.6	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EGPRS (PCS Band)**

**EUT (STANDARD COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (Standard Cover) with AC Adapter and Earphone							
<b>Mode:</b>		TX, PCS BAND, EGPRS							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (1850.2MHz)</b>									
3.700	1.9	V	3.0	35.4	1.0	-32.5	-13.0	-19.5	
5.551	10.2	V	3.0	34.7	1.0	-23.6	-13.0	-10.6	
7.401	1.1	V	3.0	34.9	1.0	-32.8	-13.0	-19.8	
3.700	-0.3	H	3.0	35.4	1.0	-34.7	-13.0	-21.7	
5.551	1.7	H	3.0	34.7	1.0	-32.0	-13.0	-19.0	
7.401	1.1	H	3.0	34.9	1.0	-32.8	-13.0	-19.8	
<b>Mid Ch, (1880.0MHz)</b>									
3.760	5.1	V	3.0	35.3	1.0	-29.2	-13.0	-16.2	
5.640	4.3	V	3.0	34.7	1.0	-29.4	-13.0	-16.4	
7.520	0.3	V	3.0	34.9	1.0	-33.6	-13.0	-20.6	
3.760	-0.2	H	3.0	35.3	1.0	-34.5	-13.0	-21.5	
5.640	-0.1	H	3.0	34.7	1.0	-33.8	-13.0	-20.8	
7.520	0.3	H	3.0	34.9	1.0	-33.7	-13.0	-20.7	
<b>High Ch, (1909.8MHz)</b>									
3.820	6.3	V	3.0	35.3	1.0	-28.0	-13.0	-15.0	
5.729	6.5	V	3.0	34.7	1.0	-27.3	-13.0	-14.3	
7.639	-1.6	V	3.0	35.0	1.0	-35.5	-13.0	-22.5	
3.820	3.0	H	3.0	35.3	1.0	-31.3	-13.0	-18.3	
5.729	2.1	H	3.0	34.7	1.0	-31.7	-13.0	-18.7	
7.639	-1.6	H	3.0	35.0	1.0	-35.6	-13.0	-22.6	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (INDUCTIVE COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (Inductive Cover) with AC Adapter and Earphone							
<b>Mode:</b>		TX, PCS BAND, EGPRS							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (1850.2MHz)</b>									
3.700	4.9	V	3.0	35.4	1.0	-29.5	-13.0	-16.5	
5.551	12.2	V	3.0	34.7	1.0	-21.6	-13.0	-8.6	
7.401	-1.9	V	3.0	34.9	1.0	-35.8	-13.0	-22.8	
3.700	-3.3	H	3.0	35.4	1.0	-37.7	-13.0	-24.7	
5.551	0.7	H	3.0	34.7	1.0	-33.0	-13.0	-20.0	
7.401	-5.9	H	3.0	34.9	1.0	-39.8	-13.0	-26.8	
<b>Mid Ch, (1880.0MHz)</b>									
3.760	5.1	V	3.0	35.3	1.0	-29.2	-13.0	-16.2	
5.640	4.3	V	3.0	34.7	1.0	-29.4	-13.0	-16.4	
7.520	-0.7	V	3.0	34.9	1.0	-34.6	-13.0	-21.6	
3.760	-3.2	H	3.0	35.3	1.0	-37.5	-13.0	-24.5	
5.640	-0.1	H	3.0	34.7	1.0	-33.8	-13.0	-20.8	
7.520	-1.7	H	3.0	34.9	1.0	-35.7	-13.0	-22.7	
<b>High Ch, (1909.8MHz)</b>									
3.820	8.3	V	3.0	35.3	1.0	-26.0	-13.0	-13.0	
5.729	8.5	V	3.0	34.7	1.0	-25.3	-13.0	-12.3	
7.639	-3.6	V	3.0	35.0	1.0	-37.5	-13.0	-24.5	
3.820	0.0	H	3.0	35.3	1.0	-34.3	-13.0	-21.3	
5.729	7.1	H	3.0	34.7	1.0	-26.7	-13.0	-13.7	
7.639	-5.6	H	3.0	35.0	1.0	-39.6	-13.0	-26.6	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									



**EUT (ON INDUCTIVE CHARGER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT (Inductive Charger) and Earphone							
<b>Mode:</b>		TX, PCS BAND, EGPRS							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, (1850.2MHz)</b>									
3.700	2.4	V	3.0	35.4	1.0	-32.0	-13.0	-19.0	
5.551	9.2	V	3.0	34.7	1.0	-24.6	-13.0	-11.6	
7.401	-3.9	V	3.0	34.9	1.0	-37.8	-13.0	-24.8	
3.700	2.7	H	3.0	35.4	1.0	-31.7	-13.0	-18.7	
5.551	6.7	H	3.0	34.7	1.0	-27.0	-13.0	-14.0	
7.401	-1.9	H	3.0	34.9	1.0	-35.8	-13.0	-22.8	
<b>Mid Ch, (1880.0MHz)</b>									
3.760	7.1	V	3.0	35.3	1.0	-27.2	-13.0	-14.2	
5.640	4.3	V	3.0	34.7	1.0	-29.4	-13.0	-16.4	
7.520	-0.7	V	3.0	34.9	1.0	-34.6	-13.0	-21.6	
3.760	2.8	H	3.0	35.3	1.0	-31.5	-13.0	-18.5	
5.640	5.9	H	3.0	34.7	1.0	-27.8	-13.0	-14.8	
7.520	-0.7	H	3.0	34.9	1.0	-34.7	-13.0	-21.7	
<b>High Ch, (1909.8MHz)</b>									
3.820	5.3	V	3.0	35.3	1.0	-29.0	-13.0	-16.0	
5.729	9.5	V	3.0	34.7	1.0	-24.3	-13.0	-11.3	
7.639	-2.6	V	3.0	35.0	1.0	-36.5	-13.0	-23.5	
3.820	10.0	H	3.0	35.3	1.0	-24.3	-13.0	-11.3	
5.729	7.1	H	3.0	34.7	1.0	-26.7	-13.0	-13.7	
7.639	-5.6	H	3.0	35.0	1.0	-39.6	-13.0	-26.6	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									



**UMTS REL 99 (PCS Band)**  
**EUT (STANDARD COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Standard Cover) with AC Adapter and Earphone							
<b>Mode:</b>		TX, PCS BAND WCDMA, Rel 99							
<b>Chamber</b>		<b>Pre-amplifer</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1852.4MHz</b>									
3.704	-5.1	V	3.0	35.4	1.0	-39.5	-13.0	-26.5	
5.557	-8.8	V	3.0	34.7	1.0	-42.6	-13.0	-29.6	
3.704	-7.3	H	3.0	35.4	1.0	-41.7	-13.0	-28.7	
5.557	-9.3	H	3.0	34.7	1.0	-43.0	-13.0	-30.0	
<b>Mid Ch, 1880.0MHz</b>									
3.760	-2.9	V	3.0	35.3	1.0	-37.2	-13.0	-24.2	
5.640	-7.7	V	3.0	34.7	1.0	-41.4	-13.0	-28.4	
3.760	-5.2	H	3.0	35.3	1.0	-39.5	-13.0	-26.5	
5.640	-10.1	H	3.0	34.7	1.0	-43.8	-13.0	-30.8	
<b>High Ch, 1907.6MHz</b>									
3.815	-2.7	V	3.0	35.3	1.0	-37.0	-13.0	-24.0	
5.723	-8.5	V	3.0	34.7	1.0	-42.3	-13.0	-29.3	
3.815	-3.5	H	3.0	35.3	1.0	-37.8	-13.0	-24.8	
5.723	-7.2	H	3.0	34.7	1.0	-41.0	-13.0	-28.0	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (INDUCTIVE COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Inductive Cover) with AC Adapter and Earphone							
<b>Mode:</b>		TX, PCS BAND WCDMA, Rel 99							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1852.4MHz</b>									
3.704	1.9	V	3.0	35.4	1.0	-32.5	-13.0	-19.5	
5.557	-2.8	V	3.0	34.7	1.0	-36.6	-13.0	-23.6	
3.704	-6.3	H	3.0	35.4	1.0	-40.7	-13.0	-27.7	
5.557	-7.3	H	3.0	34.7	1.0	-41.0	-13.0	-28.0	
<b>Mid Ch, 1880.0MHz</b>									
3.760	2.6	V	3.0	35.3	1.0	-31.7	-13.0	-18.7	
5.640	-5.7	V	3.0	34.7	1.0	-39.4	-13.0	-26.4	
3.760	-2.2	H	3.0	35.3	1.0	-36.5	-13.0	-23.5	
5.640	-7.1	H	3.0	34.7	1.0	-40.8	-13.0	-27.8	
<b>High Ch, 1907.6MHz</b>									
3.815	7.3	V	3.0	35.3	1.0	-27.0	-13.0	-14.0	
5.723	-3.5	V	3.0	34.7	1.0	-37.3	-13.0	-24.3	
3.815	-3.0	H	3.0	35.3	1.0	-37.3	-13.0	-24.3	
5.723	-5.9	H	3.0	34.7	1.0	-39.7	-13.0	-26.7	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (ON INDUCTIVE CHARGER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Inductive Charger) and Earphone							
<b>Mode:</b>		TX, PCS BAND WCDMA, Rel 99							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1852.4MHz</b>									
3.704	1.9	V	3.0	35.4	1.0	-32.5	-13.0	-19.5	
5.557	-5.8	V	3.0	34.7	1.0	-39.6	-13.0	-26.6	
3.704	-1.3	H	3.0	35.4	1.0	-35.7	-13.0	-22.7	
5.557	-8.3	H	3.0	34.7	1.0	-42.0	-13.0	-29.0	
<b>Mid Ch, 1880.0MHz</b>									
3.760	2.1	V	3.0	35.3	1.0	-32.2	-13.0	-19.2	
5.640	-8.7	V	3.0	34.7	1.0	-42.4	-13.0	-29.4	
3.760	0.8	H	3.0	35.3	1.0	-33.5	-13.0	-20.5	
5.640	-9.1	H	3.0	34.7	1.0	-42.8	-13.0	-29.8	
<b>High Ch, 1907.6MHz</b>									
3.815	3.3	V	3.0	35.3	1.0	-31.0	-13.0	-18.0	
5.723	-8.0	V	3.0	34.7	1.0	-41.8	-13.0	-28.8	
3.815	5.0	H	3.0	35.3	1.0	-29.3	-13.0	-16.3	
5.723	-8.9	H	3.0	34.7	1.0	-42.7	-13.0	-29.7	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**UMTS HSDPA (PCS Band)**

**EUT (STANDARD COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Standard Cover) with AC Adapter and Earphone							
<b>Mode:</b>		TX, PCS BAND WCDMA, HSDPA							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1852.4MHz</b>									
3.704	-6.1	V	3.0	35.4	1.0	-40.5	-13.0	-27.5	
5.557	-11.8	V	3.0	34.7	1.0	-45.6	-13.0	-32.6	
3.704	-9.3	H	3.0	35.4	1.0	-43.7	-13.0	-30.7	
5.557	-6.3	H	3.0	34.7	1.0	-40.0	-13.0	-27.0	
<b>Mid Ch, 1880.0MHz</b>									
3.760	-1.9	V	3.0	35.3	1.0	-36.2	-13.0	-23.2	
5.640	-12.7	V	3.0	34.7	1.0	-46.4	-13.0	-33.4	
3.760	-6.2	H	3.0	35.3	1.0	-40.5	-13.0	-27.5	
5.640	-11.6	H	3.0	34.7	1.0	-45.3	-13.0	-32.3	
<b>High Ch, 1907.6MHz</b>									
3.815	-5.7	V	3.0	35.3	1.0	-40.0	-13.0	-27.0	
5.723	-10.5	V	3.0	34.7	1.0	-44.3	-13.0	-31.3	
3.815	-9.0	H	3.0	35.3	1.0	-43.3	-13.0	-30.3	
5.723	-6.9	H	3.0	34.7	1.0	-40.7	-13.0	-27.7	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (INDUCTIVE COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(Inductive Cover) with AC Adapter and Earphone							
<b>Mode:</b>		TX, PCS BAND WCDMA, HSDPA							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1852.4MHz</b>									
3.704	-3.1	V	3.0	35.4	1.0	-37.5	-13.0	-24.5	
5.557	-7.8	V	3.0	34.7	1.0	-41.6	-13.0	-28.6	
3.704	-6.3	H	3.0	35.4	1.0	-40.7	-13.0	-27.7	
5.557	-8.3	H	3.0	34.7	1.0	-42.0	-13.0	-29.0	
<b>Mid Ch, 1880.0MHz</b>									
3.760	1.1	V	3.0	35.3	1.0	-33.2	-13.0	-20.2	
5.640	-9.7	V	3.0	34.7	1.0	-43.4	-13.0	-30.4	
3.760	-3.2	H	3.0	35.3	1.0	-37.5	-13.0	-24.5	
5.640	-9.1	H	3.0	34.7	1.0	-42.8	-13.0	-29.8	
<b>High Ch, 1907.6MHz</b>									
3.815	3.3	V	3.0	35.3	1.0	-31.0	-13.0	-18.0	
5.723	-7.5	V	3.0	34.7	1.0	-41.3	-13.0	-28.3	
3.815	-5.0	H	3.0	35.3	1.0	-39.3	-13.0	-26.3	
5.723	-5.9	H	3.0	34.7	1.0	-39.7	-13.0	-26.7	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**EUT (ON INDUCTIVE CHARGER)**

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
<b>Company:</b>		LG							
<b>Project #:</b>		12U14331							
<b>Date:</b>		04/13/12							
<b>Test Engineer:</b>		Chin Pang							
<b>Configuration:</b>		EUT(On Inductive Charger) and Earphone							
<b>Mode:</b>		TX, PCS BAND WCDMA, HSDPA							
<b>Chamber</b>		<b>Pre-amplifier</b>			<b>Filter</b>		<b>Limit</b>		
3m Chamber		T34 8449B			Filter 1		Part 24		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>Low Ch, 1852.4MHz</b>									
3.704	-0.1	V	3.0	35.4	1.0	-34.5	-13.0	-21.5	
5.557	-9.8	V	3.0	34.7	1.0	-43.6	-13.0	-30.6	
3.704	-5.3	H	3.0	35.4	1.0	-39.7	-13.0	-26.7	
5.557	-10.3	H	3.0	34.7	1.0	-44.0	-13.0	-31.0	
<b>Mid Ch, 1880.0MHz</b>									
3.760	2.1	V	3.0	35.3	1.0	-32.2	-13.0	-19.2	
5.640	-8.7	V	3.0	34.7	1.0	-42.4	-13.0	-29.4	
3.760	-5.2	H	3.0	35.3	1.0	-39.5	-13.0	-26.5	
5.640	-11.1	H	3.0	34.7	1.0	-44.8	-13.0	-31.8	
<b>High Ch, 1907.6MHz</b>									
3.815	3.3	V	3.0	35.3	1.0	-31.0	-13.0	-18.0	
5.723	-11.5	V	3.0	34.7	1.0	-45.3	-13.0	-32.3	
3.815	-1.0	H	3.0	35.3	1.0	-35.3	-13.0	-22.3	
5.723	-11.9	H	3.0	34.7	1.0	-45.7	-13.0	-32.7	
Rev. 03.03.09									
Note: No other emissions were detected above the system noise floor.									

**LTE BAND 13 QPSK**

**EUT (STANDARD COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
Company:		LG ELECTRONICS							
Project #:		12U14331							
Date:		03/30/12							
Test Engineer:		MENGISTU MEKURIA							
Configuration:		EUT (INDUCTIVE COVER) AND AC ADAPTER							
Mode:		TX, LTE BAND 13, QPSK MODE							
Chamber	Pre-amplifer	Filter	Limit						
5m Chamber B	T145 8449B	Filter 1	Part 27						
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>RB=1 &amp; SRB=0</b>									
3.888	-14.6	V	3.0	35.3	1.0	-48.9	-13.0	-35.9	
3.919	-10.0	V	3.0	35.3	1.0	-44.2	-13.0	-31.2	
4.666	-10.8	V	3.0	35.3	1.0	-45.1	-13.0	-32.1	
3.888	-20.9	H	3.0	35.3	1.0	-55.2	-13.0	-42.2	
3.995	-16.3	H	3.0	35.2	1.0	-50.5	-13.0	-37.5	
4.507	-14.1	H	3.0	35.3	1.0	-48.4	-13.0	-35.4	
4.692	-14.5	H	3.0	35.3	1.0	-48.8	-13.0	-35.8	
<b>RB=1 &amp; SRB=49</b>									
2.359	-22.9	V	3.0	35.4	1.0	-57.3	-13.0	-44.3	
3.932	-12.3	V	3.0	35.3	1.0	-46.6	-13.0	-33.6	
4.718	-12.7	V	3.0	35.3	1.0	-47.0	-13.0	-34.0	
2.359	-20.6	H	3.0	35.4	1.0	-55.0	-13.0	-42.0	
3.146	-23.2	H	3.0	35.6	1.0	-57.8	-13.0	-44.8	
3.932	-15.4	H	3.0	35.3	1.0	-49.7	-13.0	-36.7	
4.718	-16.7	H	3.0	35.3	1.0	-51.0	-13.0	-38.0	
<b>RB=25 &amp; SRB=12</b>									
2.346	-22.9	V	3.0	35.4	1.0	-57.3	-13.0	-44.3	
3.128	-23.0	V	3.0	35.6	1.0	-57.6	-13.0	-44.6	
3.910	-12.4	V	3.0	35.3	1.0	-46.7	-13.0	-33.7	
4.692	-12.7	V	3.0	35.3	1.0	-47.0	-13.0	-34.0	
2.346	-20.6	H	3.0	35.4	1.0	-55.0	-13.0	-42.0	
3.910	-15.5	H	3.0	35.3	1.0	-49.8	-13.0	-36.8	
4.692	-16.8	H	3.0	35.3	1.0	-51.0	-13.0	-38.0	
<b>RB=50 &amp; SRB=0</b>									
2.345	-14.3	V	3.0	35.4	1.0	-48.7	-13.0	-35.7	
3.128	-14.6	V	3.0	35.6	1.0	-49.2	-13.0	-36.2	
3.912	-17.0	V	3.0	35.3	1.0	-51.2	-13.0	-38.2	
4.694	-19.1	V	3.0	35.3	1.0	-53.4	-13.0	-40.4	
2.345	-23.8	H	3.0	35.4	1.0	-58.2	-13.0	-45.2	
3.128	-19.2	H	3.0	35.6	1.0	-53.8	-13.0	-40.8	
3.912	-15.7	H	3.0	35.3	1.0	-50.0	-13.0	-37.0	
4.694	-14.5	H	3.0	35.3	1.0	-48.8	-13.0	-35.8	



**EUT (INDUCTIVE COVER)**

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
Company:		LG ELECTRONICS							
Project #:		12U14331							
Date:		03/30/12							
Test Engineer:		MENGISTU MEKURIA							
Configuration:		EUT (INDUCTIVE COVER) AND AC ADAPTER							
Mode:		TX, LTE BAND 13, QPSK MODE							
Chamber		Pre-amplifer			Filter		Limit		
5m Chamber B		T145 8449B			Filter 1		Part 27		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>RB=1 &amp; SRB=0</b>									
2.333	-24.6	V	3.0	35.4	1.0	-59.1	-13.0	-46.1	
3.888	-11.9	V	3.0	35.3	1.0	-46.1	-13.0	-33.1	
4.666	-17.2	V	3.0	35.3	1.0	-51.5	-13.0	-38.5	
2.333	-23.8	H	3.0	35.4	1.0	-58.3	-13.0	-45.3	
3.888	-17.8	H	3.0	35.3	1.0	-52.1	-13.0	-39.1	
4.666	-18.1	H	3.0	35.3	1.0	-52.4	-13.0	-39.4	
<b>RB=1 &amp; SRB=49</b>									
3.146	-22.1	V	3.0	35.6	1.0	-56.7	-13.0	-43.7	
3.932	-15.7	V	3.0	35.3	1.0	-50.0	-13.0	-37.0	
4.718	-18.0	V	3.0	35.3	1.0	-52.3	-13.0	-39.3	
3.146	-23.6	H	3.0	35.6	1.0	-58.2	-13.0	-45.2	
3.932	-19.2	H	3.0	35.3	1.0	-53.5	-13.0	-40.5	
4.718	-17.8	H	3.0	35.3	1.0	-52.1	-13.0	-39.1	
<b>RB=25 &amp; SRB=12</b>									
3.128	-22.1	V	3.0	35.6	1.0	-56.7	-13.0	-43.7	
3.910	-15.8	V	3.0	35.3	1.0	-50.0	-13.0	-37.0	
4.692	-18.1	V	3.0	35.3	1.0	-52.4	-13.0	-39.4	
3.128	-23.6	H	3.0	35.6	1.0	-58.2	-13.0	-45.2	
3.910	-19.3	H	3.0	35.3	1.0	-53.6	-13.0	-40.6	
4.692	-17.9	H	3.0	35.3	1.0	-52.1	-13.0	-39.1	
<b>RB=50 &amp; SRB=0</b>									
3.128	-23.5	V	3.0	35.6	1.0	-58.1	-13.0	-45.1	
3.912	-11.8	V	3.0	35.3	1.0	-46.1	-13.0	-33.1	
4.694	-17.2	V	3.0	35.3	1.0	-51.4	-13.0	-38.4	
3.128	-23.0	H	3.0	35.6	1.0	-57.6	-13.0	-44.6	
3.912	-17.7	H	3.0	35.3	1.0	-52.0	-13.0	-39.0	
4.694	-18.0	H	3.0	35.3	1.0	-52.3	-13.0	-39.3	

Rev. 03.03.09

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



**EUT (ON INDUCTIVE CHARGER)**

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
Company:		LG ELECTRONICS							
Project #:		12U14331							
Date:		03/30/12							
Test Engineer:		MENGISTU MEKURIA							
Configuration:		EUT (INDUCTIVE CHARGER) AND AC ADAPTER							
Mode:		TX, LTE BAND 13, QPSK MODE							
Chamber		Pre-amplifer			Filter		Limit		
5m Chamber B		T145 8449B			Filter 1		Part 27		
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>RB=1 &amp; SRB=0</b>									
2.333	-18.6	V	3.0	35.4	1.0	-53.0	-13.0	-40.0	
3.110	-22.3	V	3.0	35.6	1.0	-56.9	-13.0	-43.9	
3.888	-16.7	V	3.0	35.3	1.0	-51.0	-13.0	-38.0	
4.666	-18.2	V	3.0	35.3	1.0	-52.5	-13.0	-39.5	
2.333	-21.7	H	3.0	35.4	1.0	-56.1	-13.0	-43.1	
3.110	-23.0	H	3.0	35.6	1.0	-57.6	-13.0	-44.6	
3.888	-19.2	H	3.0	35.3	1.0	-53.5	-13.0	-40.5	
4.666	-22.8	H	3.0	35.3	1.0	-57.1	-13.0	-44.1	
<b>RB=1 &amp; SRB=49</b>									
2.359	-24.0	V	3.0	35.4	1.0	-58.5	-13.0	-45.5	
3.146	-23.0	V	3.0	35.6	1.0	-57.6	-13.0	-44.6	
3.932	-20.6	V	3.0	35.3	1.0	-54.9	-13.0	-41.9	
4.718	-20.2	V	3.0	35.3	1.0	-54.4	-13.0	-41.4	
2.359	-25.9	H	3.0	35.4	1.0	-60.4	-13.0	-47.4	
3.146	-23.8	H	3.0	35.6	1.0	-58.4	-13.0	-45.4	
3.932	-21.9	H	3.0	35.3	1.0	-56.2	-13.0	-43.2	
<b>RB=25 &amp; SRB=12</b>									
2.346	-25.1	V	3.0	35.4	1.0	-59.5	-13.0	-46.5	
3.128	-23.7	V	3.0	35.6	1.0	-58.3	-13.0	-45.3	
3.910	-23.3	V	3.0	35.3	1.0	-57.6	-13.0	-44.6	
4.692	-17.9	V	3.0	35.3	1.0	-52.2	-13.0	-39.2	
2.346	-25.4	H	3.0	35.4	1.0	-59.8	-13.0	-46.8	
3.128	-22.7	H	3.0	35.6	1.0	-57.3	-13.0	-44.3	
3.910	-22.5	H	3.0	35.3	1.0	-56.8	-13.0	-43.8	
4.692	-21.1	H	3.0	35.3	1.0	-55.4	-13.0	-42.4	
<b>RB=50 &amp; SRB=0</b>									
2.346	-23.6	V	3.0	35.4	1.0	-58.0	-13.0	-45.0	
3.128	-21.6	V	3.0	35.6	1.0	-56.2	-13.0	-43.2	
3.912	-17.8	V	3.0	35.3	1.0	-52.1	-13.0	-39.1	
4.694	-18.4	V	3.0	35.3	1.0	-52.7	-13.0	-39.7	
2.346	-25.6	H	3.0	35.4	1.0	-60.1	-13.0	-47.1	
3.128	-21.8	H	3.0	35.6	1.0	-56.4	-13.0	-43.4	
3.912	-22.6	H	3.0	35.3	1.0	-56.8	-13.0	-43.8	
4.694	-20.2	H	3.0	35.3	1.0	-54.5	-13.0	-41.5	

Rev. 03.03.09  
 Note: No other emissions were detected above the system noise floor.

**LTE BAND 13 16QAM**

**EUT (STANDARD COVER)**

Compliance Certification Services Above 1GHz High Frequency Substitution Measurement									
Company:		LG ELECTRONICS							
Project #:		12U14331							
Date:		03/30/12							
Test Engineer:		MENGISTU MEKURIA							
Configuration:		EUT (INDUCTIVE COVER) AND AC ADAPTER							
Mode:		TX, LTE BAND 13, 16QAM MODE							
Chamber	Pre-amplifer	Filter	Limit						
5m Chamber B	T145 8449B	Filter 1	Part 27						
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>RB=1 &amp; SRB=0</b>									
2.333	-19.3	V	3.0	35.4	1.0	-53.7	-13.0	-40.7	
3.110	-22.5	V	3.0	35.6	1.0	-57.1	-13.0	-44.1	
3.888	-18.2	V	3.0	35.3	1.0	-52.5	-13.0	-39.5	
3.919	-11.7	V	3.0	35.3	1.0	-46.0	-13.0	-33.0	
4.666	-12.6	V	3.0	35.3	1.0	-46.9	-13.0	-33.9	
1.555	-27.1	H	3.0	35.6	1.0	-61.7	-13.0	-48.7	
2.333	-21.0	H	3.0	35.4	1.0	-55.4	-13.0	-42.4	
3.110	-23.4	H	3.0	35.6	1.0	-58.0	-13.0	-45.0	
4.507	-14.2	H	3.0	35.3	1.0	-48.5	-13.0	-35.5	
<b>RB=1 &amp; SRB=49</b>									
2.359	-23.3	V	3.0	35.4	1.0	-57.7	-13.0	-44.7	
3.146	-23.5	V	3.0	35.6	1.0	-58.1	-13.0	-45.1	
3.932	-11.8	V	3.0	35.3	1.0	-46.0	-13.0	-33.0	
4.718	-14.5	V	3.0	35.3	1.0	-48.8	-13.0	-35.8	
1.573	-28.6	H	3.0	35.6	1.0	-63.2	-13.0	-50.2	
2.359	-21.4	H	3.0	35.4	1.0	-55.8	-13.0	-42.8	
3.932	-16.9	H	3.0	35.3	1.0	-51.1	-13.0	-38.1	
4.718	-14.5	H	3.0	35.3	1.0	-48.8	-13.0	-35.8	
<b>RB=25 &amp; SRB=12</b>									
2.346	-24.8	V	3.0	35.4	1.0	-59.2	-13.0	-46.2	
3.128	-20.1	V	3.0	35.6	1.0	-54.7	-13.0	-41.7	
3.910	-11.7	V	3.0	35.3	1.0	-46.0	-13.0	-33.0	
4.692	-12.6	V	3.0	35.3	1.0	-46.9	-13.0	-33.9	
2.346	-21.0	H	3.0	35.4	1.0	-55.5	-13.0	-42.5	
3.128	-23.3	H	3.0	35.6	1.0	-57.9	-13.0	-44.9	
3.910	-15.8	H	3.0	35.3	1.0	-50.1	-13.0	-37.1	
4.692		H	3.0	35.3	1.0	-34.3	-13.0	-21.3	
<b>RB=50 &amp; SRB=0</b>									
2.346	-25.9	V	3.0	35.4	1.0	-60.3	-13.0	-47.3	
3.128	-13.7	V	3.0	35.6	1.0	-48.3	-13.0	-35.3	
3.915	-16.5	V	3.0	35.3	1.0	-50.8	-13.0	-37.8	
4.695	-17.6	V	3.0	35.3	1.0	-51.8	-13.0	-38.8	
2.346	-23.0	H	3.0	35.4	1.0	-57.5	-13.0	-44.5	
3.128	-19.3	H	3.0	35.6	1.0	-53.9	-13.0	-40.9	
3.915	-15.2	H	3.0	35.3	1.0	-49.5	-13.0	-36.5	
4.695	-14.9	H	3.0	35.3	1.0	-49.1	-13.0	-36.1	

**EUT (INDUCTIVE COVER)**

Compliance Certification Services									
Above 1GHz High Frequency Substitution Measurement									
Company:		LG ELECTRONICS							
Project #:		12U14331							
Date:		03/30/12							
Test Engineer:		MENGISTU MEKURIA							
Configuration:		EUT (INDUCTIVE COVER) AND AC ADAPTER							
Mode:		TX, LTE BAND 13, 16QAM MODE							
Chamber		Pre-amplifer		Filter		Limit			
5m Chamber B		T145 8449B		Filter 1		Part 27			
f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>RB=1 &amp; SRB=0</b>									
2.333	-23.2	V	3.0	35.4	1.0	-57.6	-13.0	-44.6	
3.110	-23.1	V	3.0	35.6	1.0	-57.7	-13.0	-44.7	
3.888	-15.4	V	3.0	35.3	1.0	-49.7	-13.0	-36.7	
4.666	-18.0	V	3.0	35.3	1.0	-52.3	-13.0	-39.3	
2.333	-23.7	H	3.0	35.4	1.0	-58.1	-13.0	-45.1	
3.110	-22.9	H	3.0	35.6	1.0	-57.6	-13.0	-44.6	
3.888	-20.5	H	3.0	35.3	1.0	-54.8	-13.0	-41.8	
4.666	-17.0	H	3.0	35.3	1.0	-51.2	-13.0	-38.2	
<b>RB=1 &amp; SRB=49</b>									
2.359	-24.5	V	3.0	35.4	1.0	-58.9	-13.0	-45.9	
3.146	-22.0	V	3.0	35.6	1.0	-56.6	-13.0	-43.6	
3.932	-12.3	V	3.0	35.3	1.0	-46.5	-13.0	-33.5	
4.718	-16.8	V	3.0	35.3	1.0	-51.1	-13.0	-38.1	
2.359	-25.4	H	3.0	35.4	1.0	-59.8	-13.0	-46.8	
3.146	-23.6	H	3.0	35.6	1.0	-58.2	-13.0	-45.2	
3.932	-18.9	H	3.0	35.3	1.0	-53.2	-13.0	-40.2	
4.718	-16.4	H	3.0	35.3	1.0	-50.7	-13.0	-37.7	
<b>RB=25 &amp; SRB=12</b>									
2.346	-23.1	V	3.0	35.4	1.0	-57.5	-13.0	-44.5	
3.128	-21.1	V	3.0	35.6	1.0	-55.7	-13.0	-42.7	
3.910	-11.8	V	3.0	35.3	1.0	-46.0	-13.0	-33.0	
4.692	-16.9	V	3.0	35.3	1.0	-51.1	-13.0	-38.1	
2.346	-24.1	H	3.0	35.4	1.0	-58.5	-13.0	-45.5	
3.128	-21.6	H	3.0	35.6	1.0	-56.2	-13.0	-43.2	
3.910	-19.0	H	3.0	35.3	1.0	-53.3	-13.0	-40.3	
4.692	-14.9	H	3.0	35.3	1.0	-49.2	-13.0	-36.2	
<b>RB=50 &amp; SRB=0</b>									
2.346	-23.1	V	3.0	35.4	1.0	-57.5	-13.0	-44.5	
3.128	-21.1	V	3.0	35.6	1.0	-55.7	-13.0	-42.7	
3.914	-11.8	V	3.0	35.3	1.0	-46.0	-13.0	-33.0	
5.474	-14.9	V	3.0	35.4	1.0	-49.3	-13.0	-36.3	
2.346	-24.5	H	3.0	35.4	1.0	-58.9	-13.0	-45.9	
3.128	-20.6	H	3.0	35.6	1.0	-55.2	-13.0	-42.2	
3.914	-18.9	H	3.0	35.3	1.0	-53.2	-13.0	-40.2	
4.694	-16.9	H	3.0	35.3	1.0	-51.2	-13.0	-38.2	

**EUT (INDUCTIVE CHARGER)**

**Compliance Certification Services  
 Above 1GHz High Frequency Substitution Measurement**

**Company:** LG ELECTRONICS  
**Project #:** 12U14331  
**Date:** 03/30/12  
**Test Engineer:** MENGISTU MEKURIA  
**Configuration:** EUT (INDUCTIVE CHARGER) AND AC ADAPTER  
**Mode:** TX, LTE BAND 13, 16QAM MODE

<b>Chamber</b>	<b>Pre-amplifier</b>	<b>Filter</b>	<b>Limit</b>
5m Chamber B	T145 8449B	Filter 1	Part 27

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Distance (m)	Preamp (dB)	Filter (dB)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
<b>RB=1 &amp; SRB=0</b>									
2.333	-20.2	V	3.0	35.4	1.0	-54.7	-13.0	-41.7	
3.110	-22.7	V	3.0	35.6	1.0	-57.3	-13.0	-44.3	
3.888	-20.2	V	3.0	35.3	1.0	-54.4	-13.0	-41.4	
4.666	-18.5	V	3.0	35.3	1.0	-52.8	-13.0	-39.8	
2.333	-19.5	H	3.0	35.4	1.0	-53.9	-13.0	-40.9	
3.110	-22.7	H	3.0	35.6	1.0	-57.3	-13.0	-44.3	
3.888	-20.6	H	3.0	35.3	1.0	-54.9	-13.0	-41.9	
4.666	-19.7	H	3.0	35.3	1.0	-54.0	-13.0	-41.0	
<b>RB=1 &amp; SRB=49</b>									
2.359	-23.6	V	3.0	35.4	1.0	-58.1	-13.0	-45.1	
3.146	-24.0	V	3.0	35.6	1.0	-58.6	-13.0	-45.6	
3.932	-19.5	V	3.0	35.3	1.0	-53.8	-13.0	-40.8	
4.718	-17.1	V	3.0	35.3	1.0	-51.4	-13.0	-38.4	
2.359	-19.0	H	3.0	35.4	1.0	-53.5	-13.0	-40.5	
3.146	-24.0	H	3.0	35.6	1.0	-58.6	-13.0	-45.6	
3.932	-21.8	H	3.0	35.3	1.0	-56.0	-13.0	-43.0	
4.718	-19.8	H	3.0	35.3	1.0	-54.1	-13.0	-41.1	
<b>RB=25 &amp; SRB=12</b>									
2.346	-24.3	V	3.0	35.4	1.0	-58.7	-13.0	-45.7	
3.128	-23.5	V	3.0	35.6	1.0	-58.1	-13.0	-45.1	
3.910	-23.3	V	3.0	35.3	1.0	-57.5	-13.0	-44.5	
4.692	-18.5	V	3.0	35.3	1.0	-52.8	-13.0	-39.8	
2.346	-24.5	H	3.0	35.4	1.0	-58.9	-13.0	-45.9	
3.128	-22.2	H	3.0	35.6	1.0	-56.8	-13.0	-43.8	
3.910	-22.3	H	3.0	35.3	1.0	-56.6	-13.0	-43.6	
4.692	-19.5	H	3.0	35.3	1.0	-53.8	-13.0	-40.8	
<b>RB=50 &amp; SRB=0</b>									
2.346	-25.1	V	3.0	35.4	1.0	-59.5	-13.0	-46.5	
3.128	-22.7	V	3.0	35.6	1.0	-57.3	-13.0	-44.3	
3.910	-20.6	V	3.0	35.3	1.0	-54.9	-13.0	-41.9	
4.692	-18.4	V	3.0	35.3	1.0	-52.7	-13.0	-39.7	
2.346	-25.5	H	3.0	35.4	1.0	-60.0	-13.0	-47.0	
3.128	-23.3	H	3.0	35.6	1.0	-57.9	-13.0	-44.9	
3.910	-21.1	H	3.0	35.3	1.0	-55.3	-13.0	-42.3	
4.692	-20.0	H	3.0	35.3	1.0	-54.3	-13.0	-41.3	

Rev. 03.03.09  
 Note: No other emissions were detected above the system noise floor.