FCC CFR47 PART 22H AND 24E
CERTIFICATION TEST REPORT

FOR

CELLULAR/ PCS CDMA AND LTE PHONE WITH BLUETOOTH AND WLAN

MODEL NUMBER: VS840, LG-VS840, LGVS840

FCC ID: ZNFVS840

REPORT NUMBER: 11U14124-1, Revision D

ISSUE DATE: DECEMBER 27, 2011

Prepared for
LG ELECTRONICS MOBILECOMM U.S.A., INC.
10101 OLD GROVE ROAD
SAN DIEGO, CA 92131

Prepared by

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
---	12/05/11	Initial Issue	T. Chan
A	12/13/11	Removed *Average* Power from the Maximum Output Power Section	A. Zaffar
B	12/15/11	Removed all instances of Average Power from the report	A. Zaffar
C	12/20/11	Added ERP and EIRP data from inductive cover and charger tests	M. Mekuria
D	12/27/11	Revised Page 13 table to correct row height.	A. Zaffar

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LG ELECTRONICS MOBILECOMM U.S.A., INC.
10101 OLD GROVE ROAD
SAN DIEGO, CA 92131

EUT DESCRIPTION: CELLULAR/ PCS CDMA AND LTE PHONE WITH BLUETOOTH AND WLAN

MODEL: VS840, LG-VS840, LGVS840

SERIAL NUMBER: D92

DATE TESTED: DECEMBER 05, 2011

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 22H & 24E	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:

THU CHAN
ENGINEERING MANAGER
UL CCS

Tested By:

MENGISTU MEKURIA
EMC ENGINEER
UL CCS

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with TIA-603-C, FCC CFR 47 Part 2, FCC CFR 47 Part 22, and FCC CFR Part 24.

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:

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

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

4.3. MEASUREMENT UNCERTAINTY

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

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

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a smart-phone that features Cellular/PCS CDMA and PCS LTE with Bluetooth and WLAN.

5.2. MAXIMUM OUTPUT POWER

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

Part 22 Cellular Band

Frequency range (MHz)	Modulation	Conducted		CONFIGURATION	ERP	
		dBm	mW		dBm	mW
824.7 – 848.31	1XRTT	30.06	1013.9	Standard Cover	26.32	428.5
				Inductive Cover	27.54	567.5
				Inductive Charger	23.58	228.0
824.7 – 848.31	EVDO REV. A.	27.72	591.6	Standard Cover	20.30	107.2
				Inductive Cover	21.39	137.7
				Inductive Charger	17.15	51.9

Part 24 PCS Band

Frequency range (MHz)	Modulation	Conducted		EIRP		
		dBm	mW	CONFIGURATION	dBm	mW
1851.25-1908.75	1xRTT	29.90	977.2	Standard Cover	32.23	1671.1
				Inductive Cover	29.52	895.4
				Inductive Charger	28.76	751.6
1851.25-1908.75	EVDO REV. A.	26.74	472.1	Standard Cover	23.14	206.1
				Inductive Cover	23.52	224.9
				Inductive Charger	25.22	332.7

5.3. SOFTWARE AND FIRMWARE

The EUT is linked with Agilent 8960 Communication Test Set.

5.4. WORST-CASE CONFIGURATION AND MODE

The worst-case is EUT on the highest power. Based on Peak Power measurement investigations, the following modes should be considered as worst-case scenario for all other measurements.

Worst-case modes:
- CDMA 2000 1xRTT
- CDMA 2000 EVDO REV. A

Since the EUT is a portable device, for the fundamental tests the three orientations have been investigated on X, Y and Z orientations, and the worst case was determined on Y position for cell band and Z position for PCS band without AC adapter.

5.5. DESCRIPTION OF TEST SETUP

RADIATED TESTS SUPPORT EQUIPMENT

STANDARD OR INDUCTIVE COVER

PERIPHERAL SUPPORT EQUIPMENT LIST			
Description	**Manufacturer**	**Model**	**Serial Number**
AC ADAPTER	LG ELECTRONICS	MCS-02WS	SA 14258000036
HEADSET	LG ELECTRONICS	N/A	N/A
INDUCTIVE COVER	LG ELECTRONICS	WCC-840	A1110WP-RX000030

INDUCTIVE CHARGER WITH INDUCTIVE COVER

PERIPHERAL SUPPORT EQUIPMENT LIST			
Description	**Manufacturer**	**Model**	**Serial Number**
AC ADAPTER	LG ELECTRONICS	WCA-D01WT	TA170000040
HEADSET	LG ELECTRONICS	N/A	N/A
INDUCTIVE CHARGER	LG ELECTRONICS	WCP-700	A1106WP000029
INDUCTIVE COVER	LG ELECTRONICS	WCC-840	A1110WP-RX000030

CONDUCTED TESTS I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identica Ports	Connector Type	Cable Type	Cable Length	Remarks
1	DC	1	MINI USB	UN-SHELDED	1.0m	N/A
2	RF	1	RF	SHELDED	0.1m	N/A
3	RF	1	SMA	SHELDED	0.6 m	N/A

RADIATED TESTS I/O CABLES

STANDARD OR INDUCTIVE COVER

I/O CABLE LIST						
Cable No.	Port	# of Identica Ports	Connector Type	Cable Type	Cable Length	Remarks
1	DC	1	MINI USB	UN-SHELDED	1.0m	N/A
2	AUDIO	1	MINI JACK	UN-SHELDED	1.0m	Volume control on cable

INDUCTIVE CHARGER WITH INDUCTIVE COVER

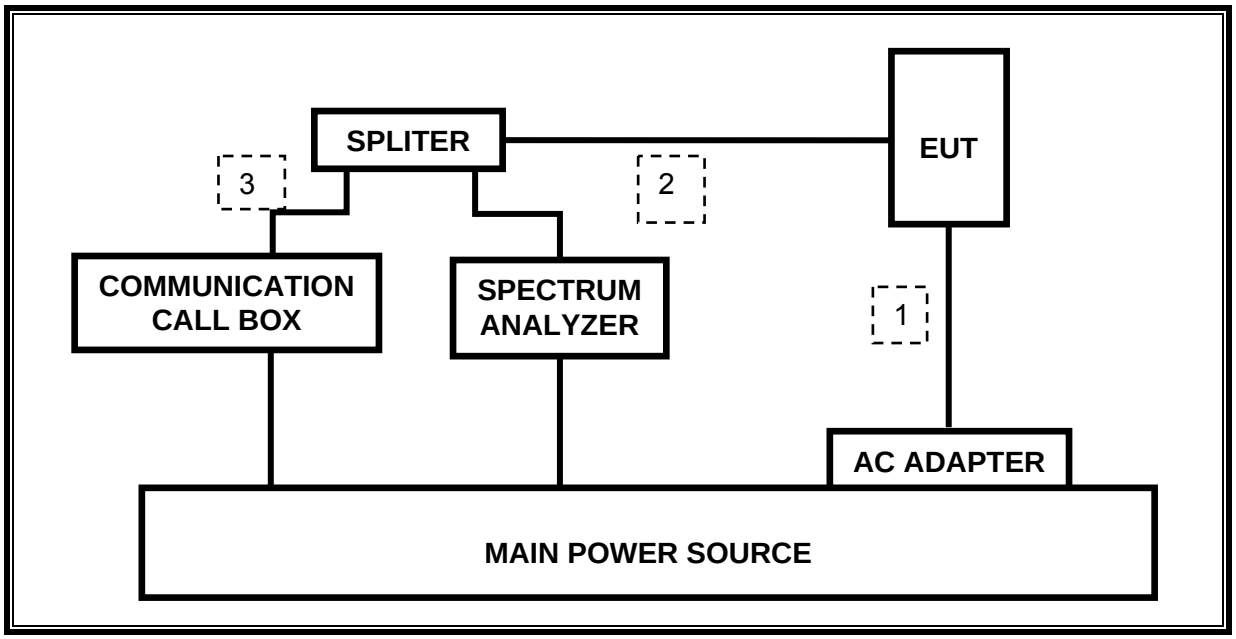
I/O CABLE LIST						
Cable No.	Port	# of Identica Ports	Connector Type	Cable Type	Cable Length	Remarks
1	DC	1	MINI USB	UN-SHELDED	1.0m	N/A
2	AUDIO	1	MINI JACK	UN-SHELDED	1.0m	Volume control on cable

TEST SETUP

- The EUT is a stand-alone device and was tested with AC/USB adapter and earphones.
- The EUT is sit on inductive charger was tested with AC adapter and earphones

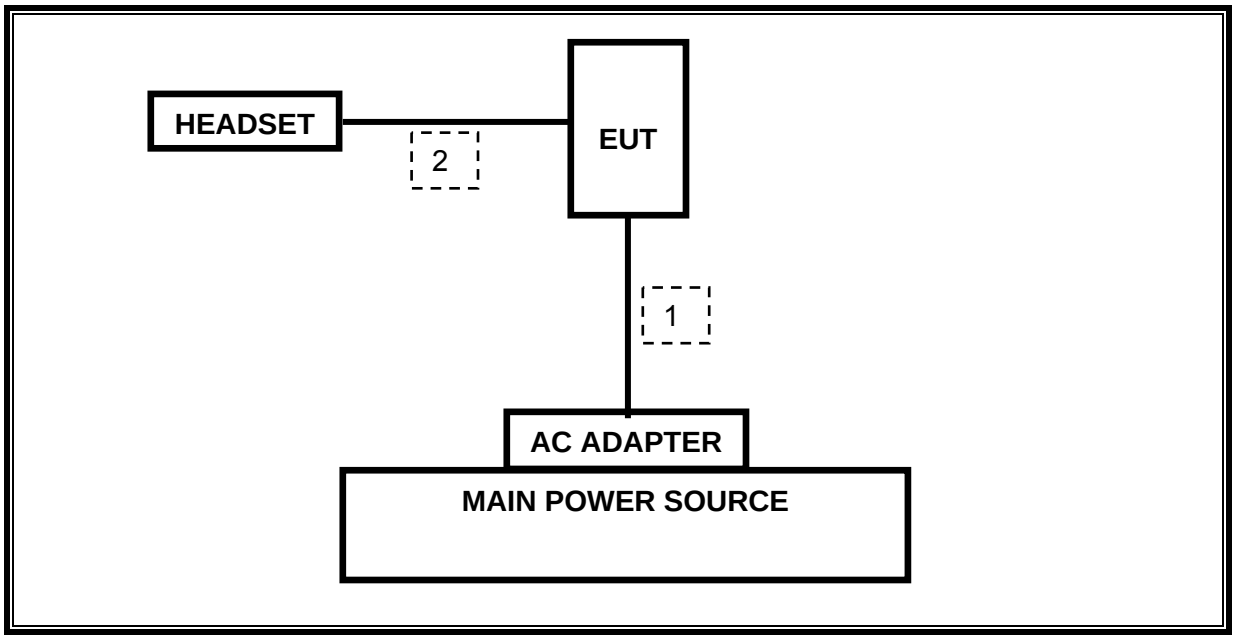
CONDUCTED SETUP DIAGRAM FOR TESTS

STANDARD OR INDUCTIVE COVER

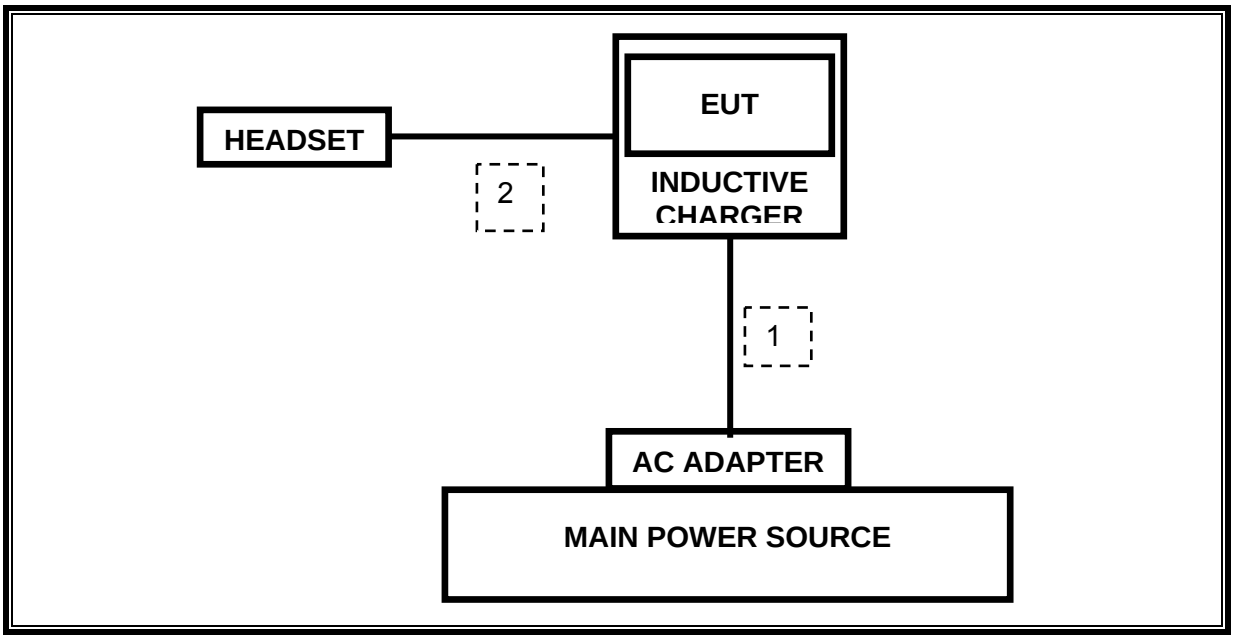


RADIATED SETUP DIAGRAM FOR TESTS

STANDARD OR INDUCTIVE COVER



INDUCTIVE CHRGER AND INDUCTIVE COVER



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**
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	04/07/12
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01178	08/30/12
Antenna, Horn, 18 GHz	EMCO	3115	C00783	06/29/12
Antenna, Horn, 18 GHz	EMCO	3115	C00945	06/29/12
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01011	07/16/12
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C01052	07/12/12
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00885	01/27/12
Communications Test Set	Agilent / HP	E5515C	C01086	06/17/12
Temperature / Humidity Chamber	Thermotron	SE 600-10-10	C00930	10/20/12
Highpass Filter, 1.5 GHz	Micro-Tronics	HPM13193	N02689	CNR
Highpass Filter, 2.7 GHz	Micro-Tronics	HPM13194	N02687	CNR
Directional Coupler	RF-Lambda	RFDC5M06G15	NA	CNR
Signal Generator, 20 GHz	Agilent / HP	83732B	C00774	07/14/12
Antenna, Tuned Dipole 400~1000 MHz	ETS	3121C DB4	C00993	07/10/12

7. RF POWER OUTPUT VERIFICATION

Maximum output power is verified on the Low, Middle and High channels according to procedures in section 4.4.5.2 of 3GPP2 C.S0011/TIA-98-E for 1xRTT, section 3.1.2.3.4 of 3GPP2 C.S0033-0/TIA-866 for Rel. 0 and section 4.3.4 of 3GPP2 C.S0033-A for Rev. A

7.1. CDMA2000

CDMA2000 1xRTT

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

Application	Rev, License
CDMA2000 Mobile Test	B.15.18, L

- Protocol Rev > 6 (IS-2000-0)
- System ID: 7; NID: 1, Reg. Ch. #.: 610 for Cell, 600 for PCS & 450 for AWS
- Radio Config (RC) > RC1 or RC3
- Service Option (SO) Setup > SO55 or SO32
- Traffic Data Rate > Full
- Rvs Power Ctrl > All Up bits (Maximum TxPout)

RF Output Power for Cellular Band

Radio Configuration (RC)	Service Option (SO)	RF Pwr (dBm)		
		Ch. 1013/824.7 MHz	Ch384/836.52 MHz	Ch.777/848.31 MHz
		Peak	Peak	Peak
RC1	2 (Loopback)	29.67	**30.06**	29.63
	55 (Loopback)	29.74	30.05	29.76
RC2	9 (Loopback)	29.67	29.77	29.66
	55 (Loopback)	29.65	29.72	29.28
RC3	2 (Loopback)	29.02	29.35	28.67
	55 (Loopback)	29.16	29.14	28.97
	32 (+F-SCH)	28.79	29.48	28.86
	32 (+SCH)	28.85	29.52	29.04
RC4	2 (Loopback)	29.26	29.46	29.00
	55 (Loopback)	29.18	29.46	28.43
	32 (+F-SCH)	29.17	29.44	28.98
	32 (+SCH)	29.17	29.53	28.99
RC5	9 (Loopback)	29.17	29.50	28.96
	55 (Loopback)	29.20	29.47	28.93

RF Output Power for PCS Band				
Radio Configuration (RC)	Service Option (SO)	RF Pwr (dBm)		
		Ch. 25/1851.25 MHz	Ch.600/1880 MHz	Ch.1175/1908.75 MHz
		Peak	Peak	Peak
RC1	2 (Loopback)	29.27	**29.90**	28.37
	55 (Loopback)	29.07	29.65	28.61
RC2	9 (Loopback)	29.24	29.89	28.63
	55 (Loopback)	29.31	29.85	28.60
RC3	2 (Loopback)	28.82	29.25	28.23
	55 (Loopback)	28.79	29.25	28.27
	32 (+F-SCH)	28.79	29.33	28.22
	32 (+SCH)	28.85	29.26	28.26
RC4	2 (Loopback)	28.59	29.02	28.07
	55 (Loopback)	28.81	29.17	28.24
	32 (+F-SCH)	28.79	29.34	28.26
	32 (+SCH)	28.81	29.23	28.24
RC5	9 (Loopback)	28.79	29.27	28.17
	55 (Loopback)	28.75	29.15	28.21

1xEv-Do - Release 0 (Rel. 0)

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

EVDO Release 0 - RTAP

- Call Setup > Shift & Preset
- Call Control:
  - Access Network Info > Cell Parameters > Sector ID > 00000000 : 00000000 : 00000000 : 00000000 > Subnet Mask > 0
  - Generator Info > Termination Parameters > Max Forward Packet Duration > 16 Slots
- Call Parms:
  - Cell Power > -105.5 dBm/1.23 MHz
  - System ID: 7; NID: 1, Reg. Ch. #.: 610 for Cell, 600 for PCS & 450 for AWS
  - 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 : 00000000 : 00000000 : 00000000 > Subnet Mask > 0
  - Generator Info > Termination Parameters > Max Forward Packet Duration > 16 Slots
- Call Parms:
  - 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)

CELL Band

FTAP Rate	RTAP Rate	Channel	f (MHz)	RF Pwr (dBm)
				Peak
307.2 kbps (2 slot, QPSK)	153.6 kbps	1013	824.70	27.81
		384	836.52	27.37
		777	848.31	27.44

PCS Band

FTAP Rate	RTAP Rate	Channel	f (MHz)	RF Pwr (dBm)
				Peak
307.2 kbps (2 slot, QPSK)	153.6 kbps	25	1851.25	26.60
		600	1880.00	27.46
		1175	1908.75	26.35

1xEv-Do - Revision A (Rev. A)

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

Application	Rev, License
1xEV-DO Terminal Test	A.09.13

EVDO Rev. 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: 00000000: 00000000: 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 Rev. 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: 00000000: 00000000: 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)

CELL Band

FETAP Traffic Format	RETAP Data Payload Size	Channel	f (MHz)	RF Pwr (dBm) Peak
307.2k, QPSK/ ACK channel is transmitted at all the slots	4096	1013	824.70	27.57
		384	836.52	**27.72**
		777	848.31	27.36

PCS Band

FETAP Traffic Format	RETAP Data Payload Size	Channel	f (MHz)	RF Pwr (dBm) Peak
307.2k, QPSK/ ACK channel is transmitted at all the slots	4096	25	1851.25	**26.74**
		600	1880.00	26.73
		1175	1908.75	26.63

8. CONDUCTED TEST RESULTS

8.1. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

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

- CDMA 2000 1xRTT
- CDMA 2000 EVDO REV. A

RESULTS

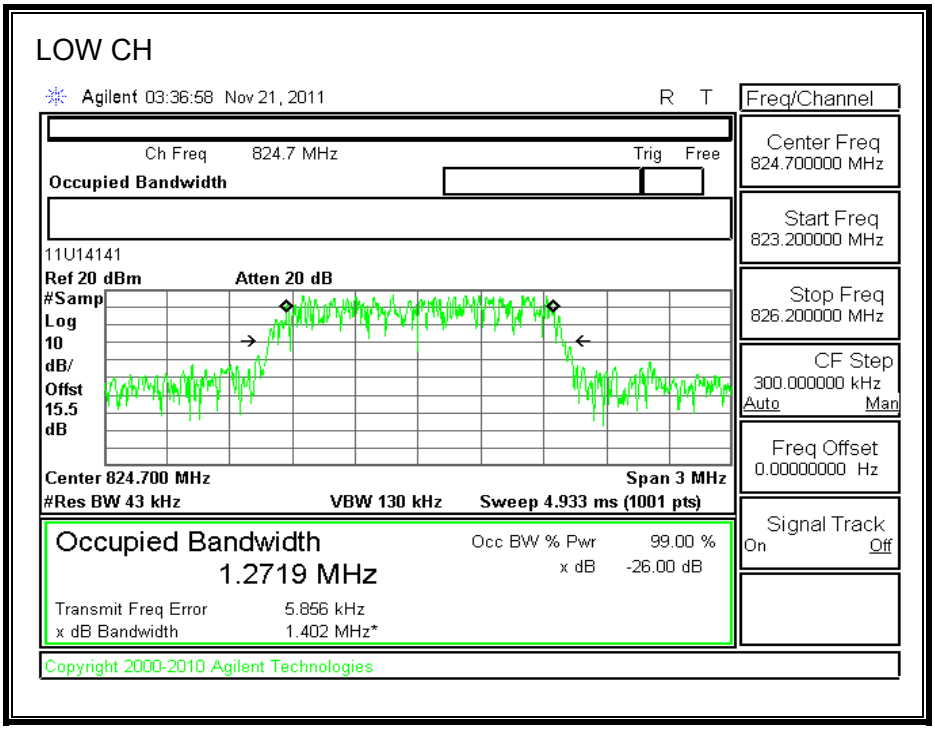
Mode	Band	Channel	f (MHz)	99% BW (kHz)	-26dB BW (MHz)
CDMA 2000 1xRTT	CELL	1013	824.70	1.2718	1.402
		384	836.52	1.2249	1.400
		777	848.31	1.2604	1.422
	PCS	25	1851.25	1.2340	1.407
		600	1880.00	1.2690	1.405
		1175	1908.75	1.2807	1.415

Mode	Band	Channel	f (MHz)	99% BW (MHz)	-26dB BW (MHz)
CDMA 2000 EVDO REV.A	CELL	1013	824.70	1.2441	1.409
		384	836.52	1.2679	1.401
		777	848.31	1.3000	1.416
	PCS	25	1851.25	1.3074	1.443
		600	1880.00	1.3012	1.423
		1175	1908.75	1.3046	1.422

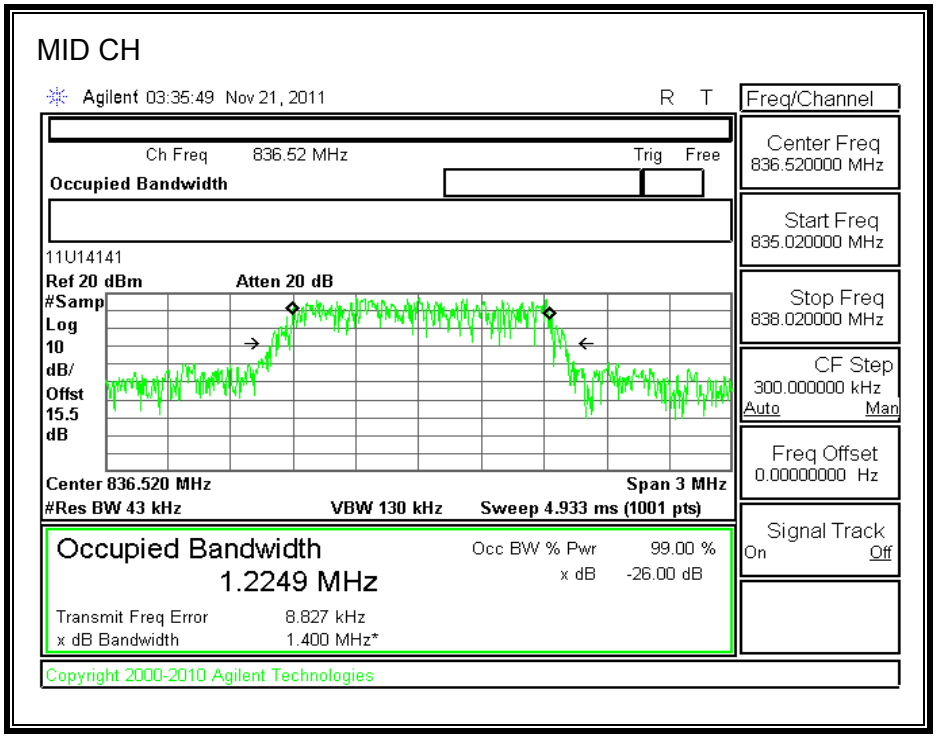
99% BANDWIDTH and 26dB

1xRTT 850 BAND

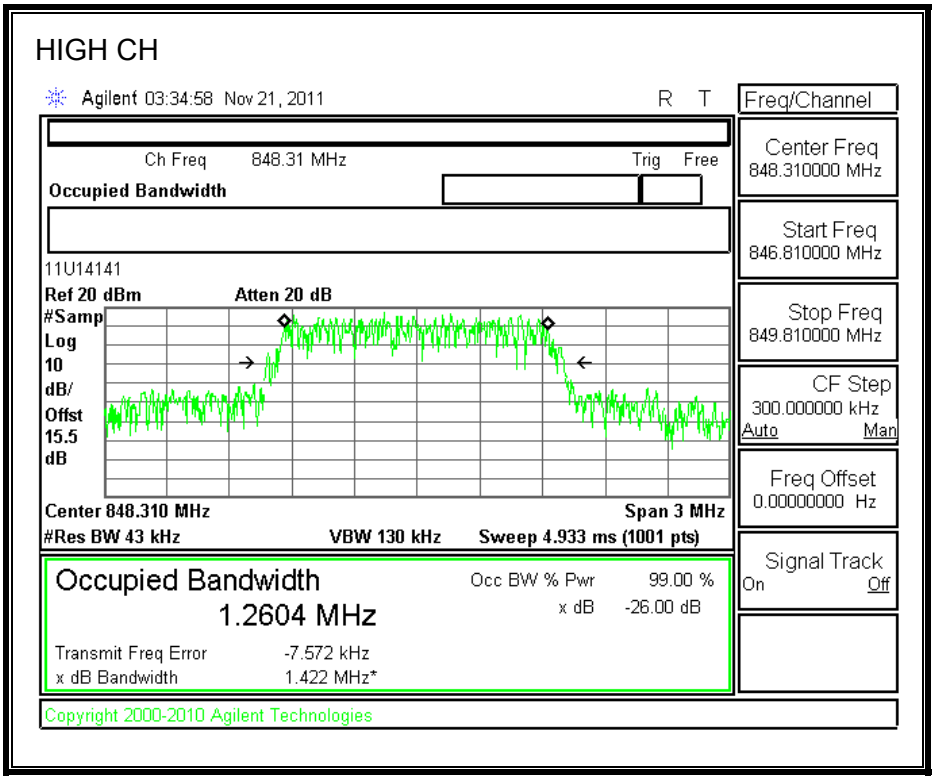
LOW CH



MID CH

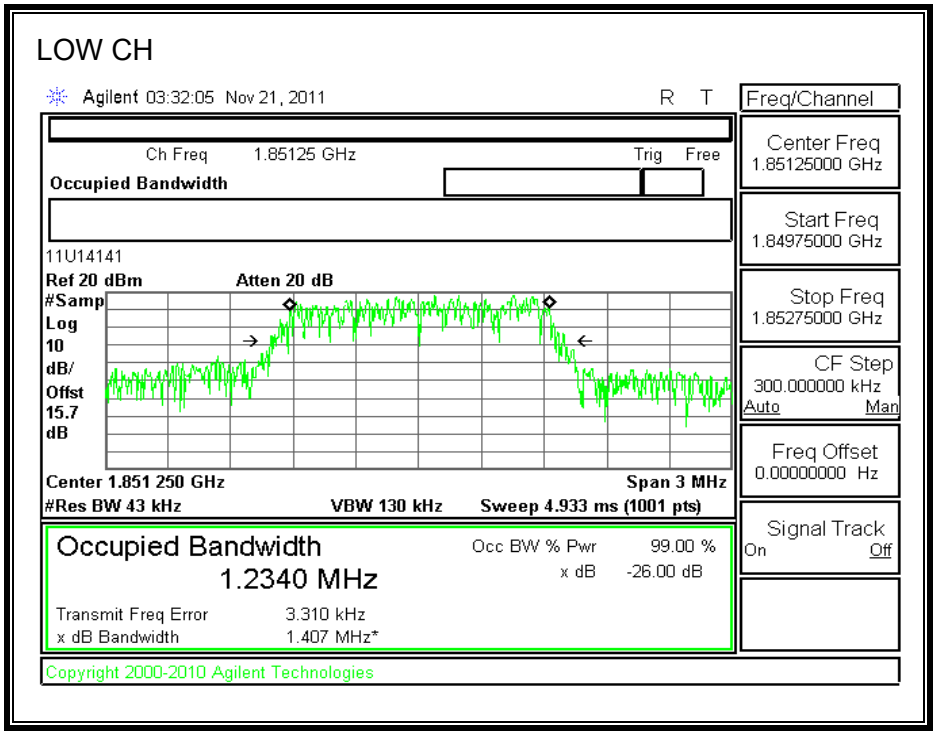


HIGH CH



1xRTT 1900 BAND

LOW CH



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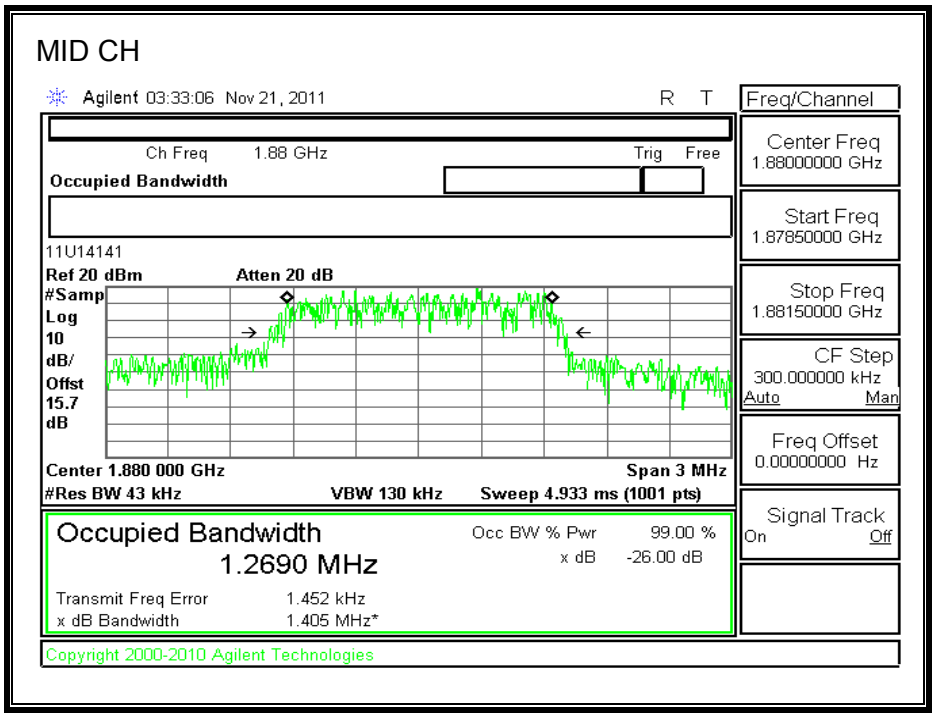

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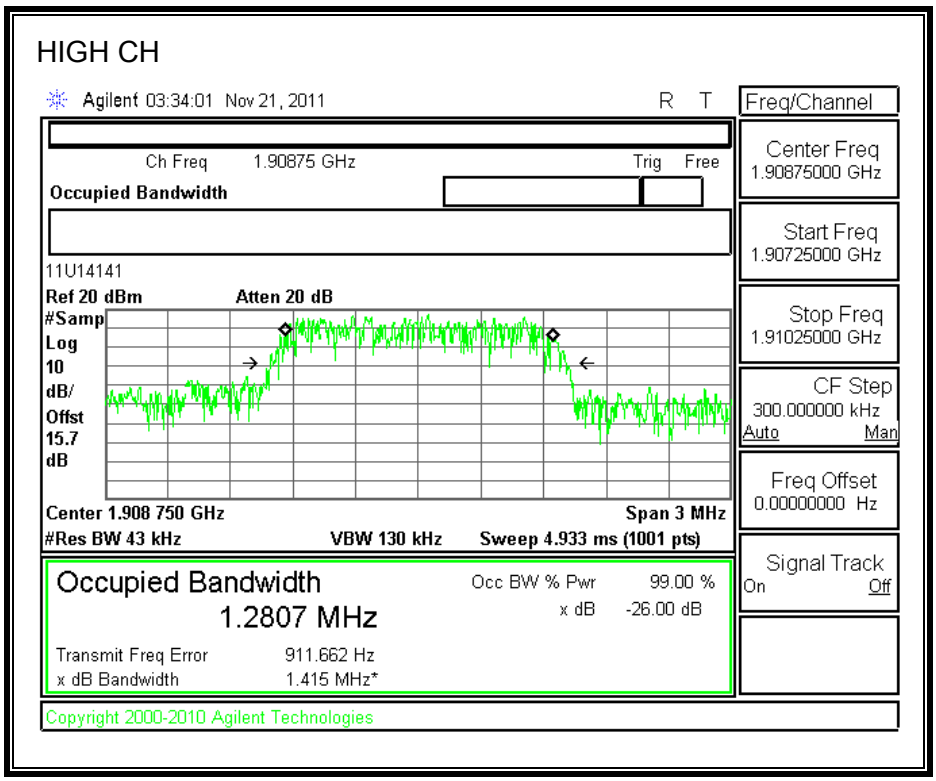
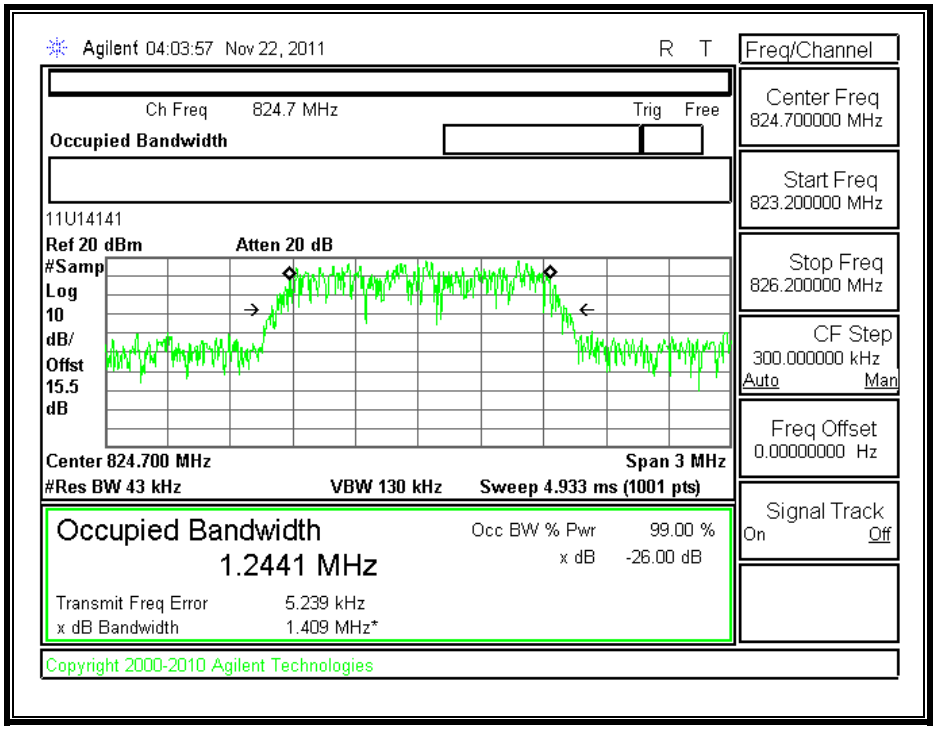
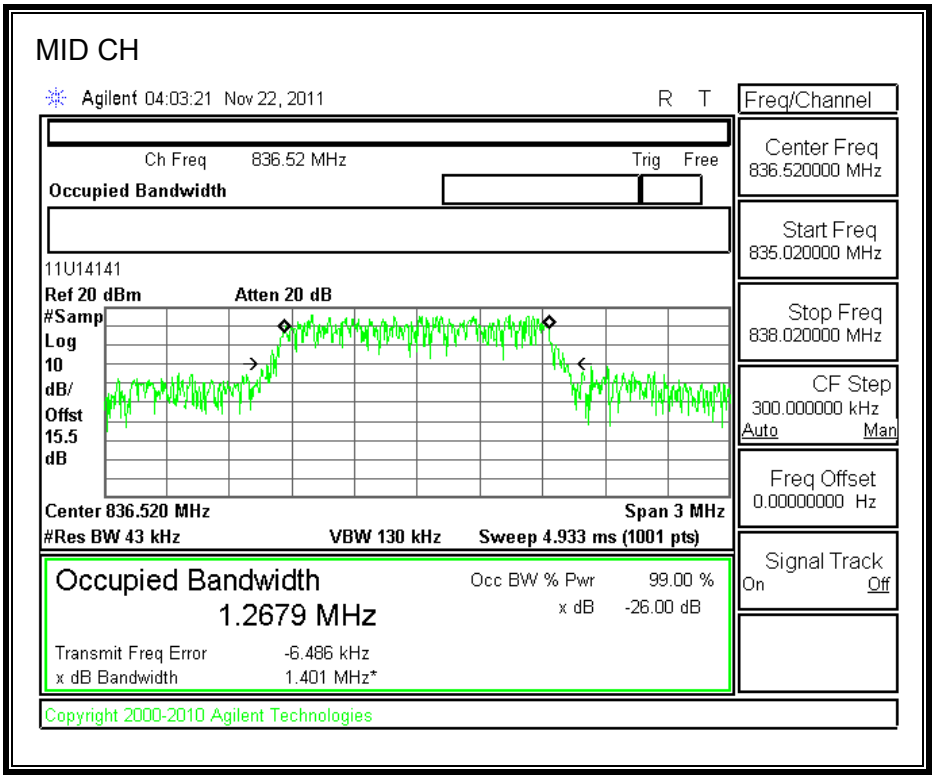


EVDO REV A 850 BAND





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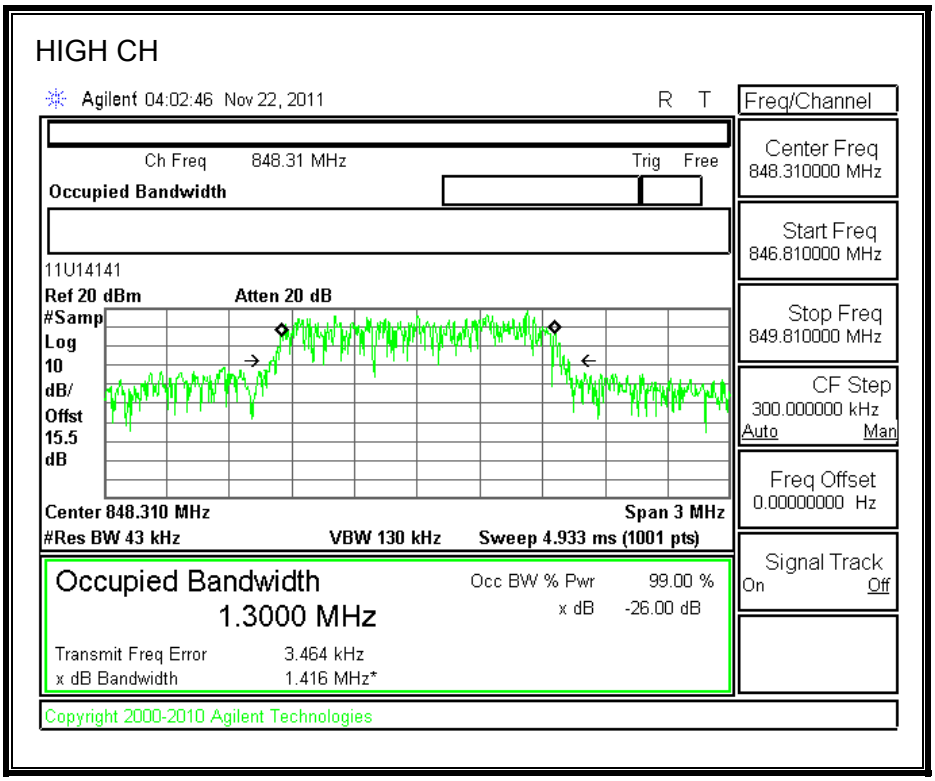
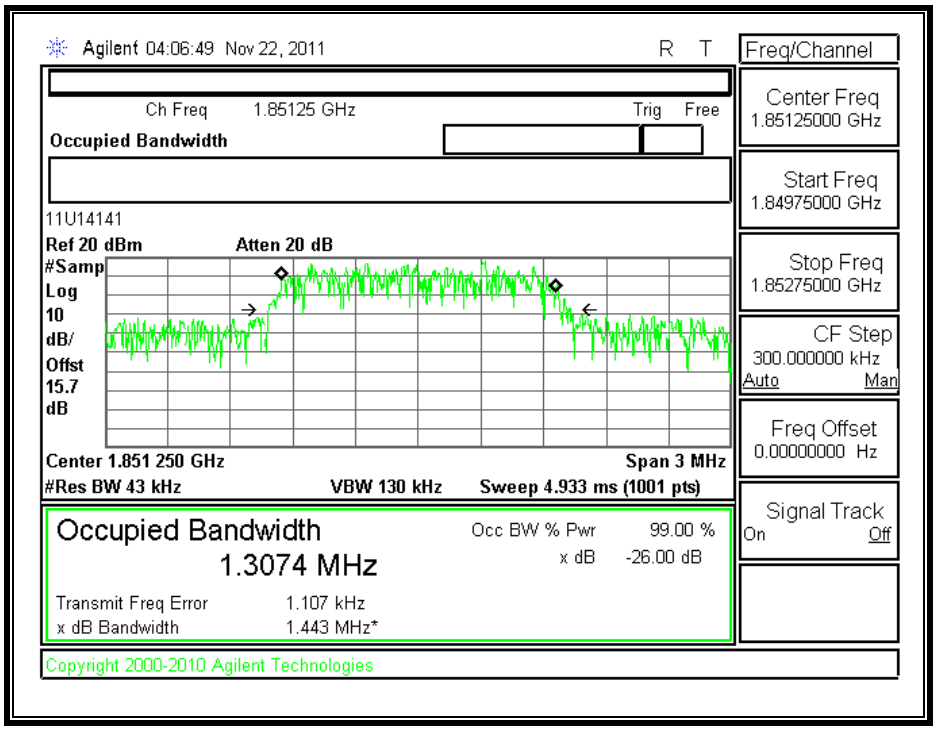
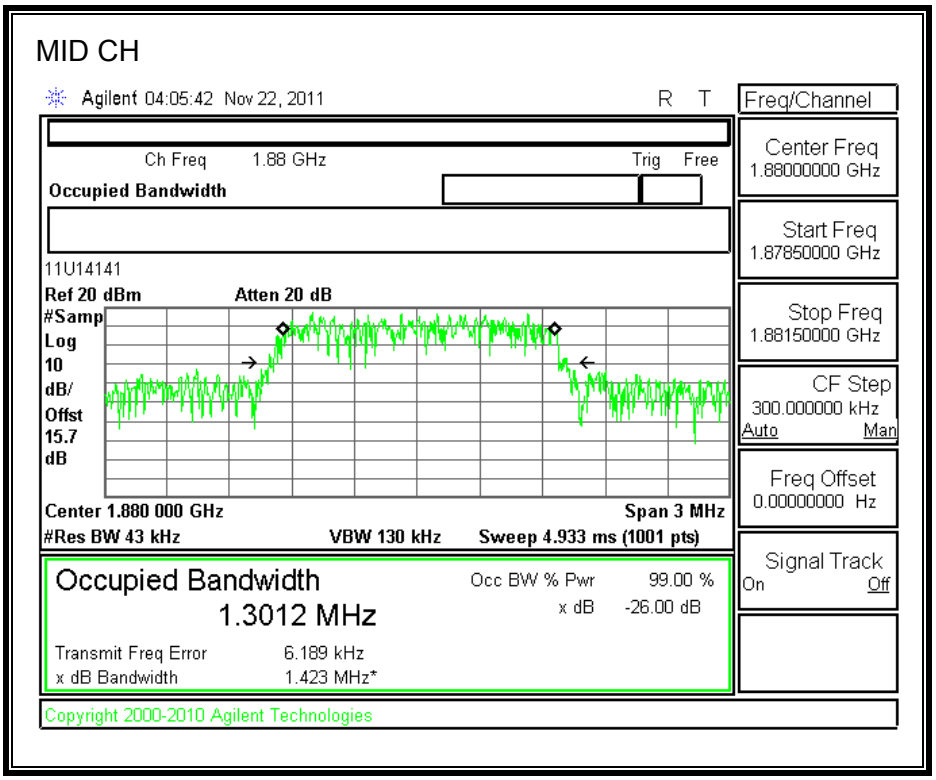
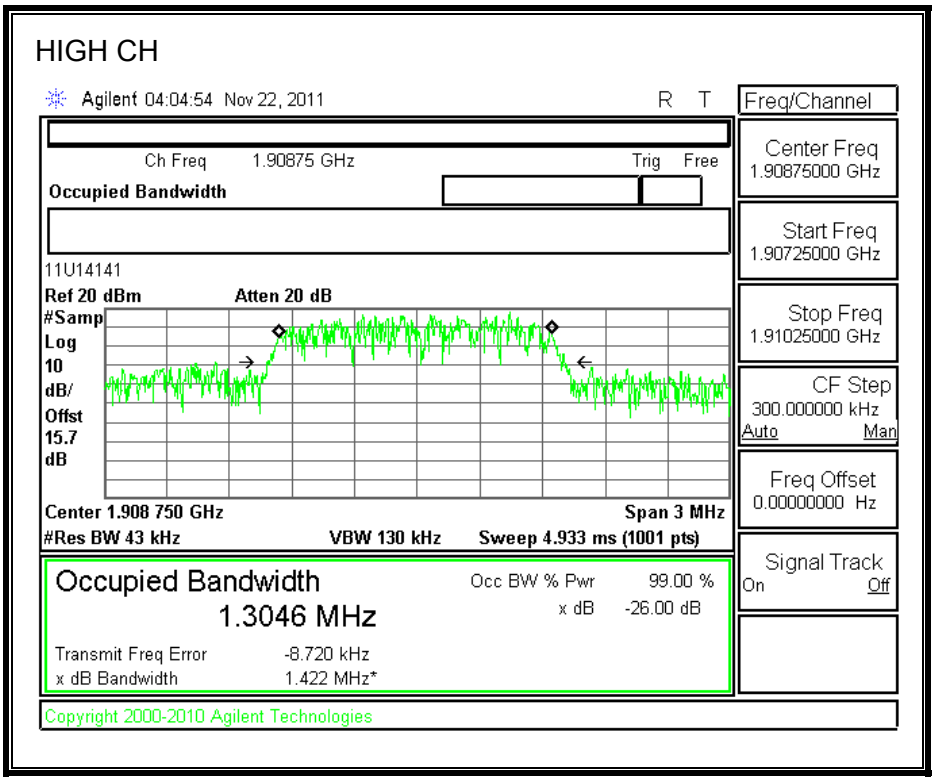


EVDO REV A 1900 BAND





HIGH CH



8.2. BAND EDGE

RULE PART(S)

FCC: §22.359, and 24.238

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 transmitter output was connected to a Agilent 8960 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, 849, 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.

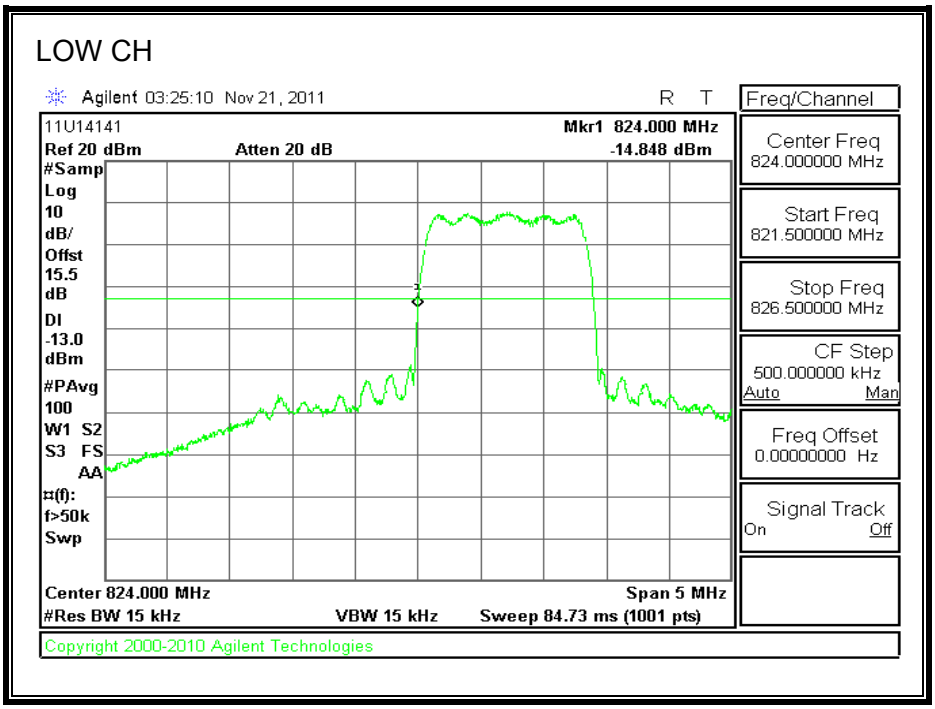
MODES TESTED

- CDMA 2000 1xRTT
- CDMA 2000 EVDO REV. A

RESULTS

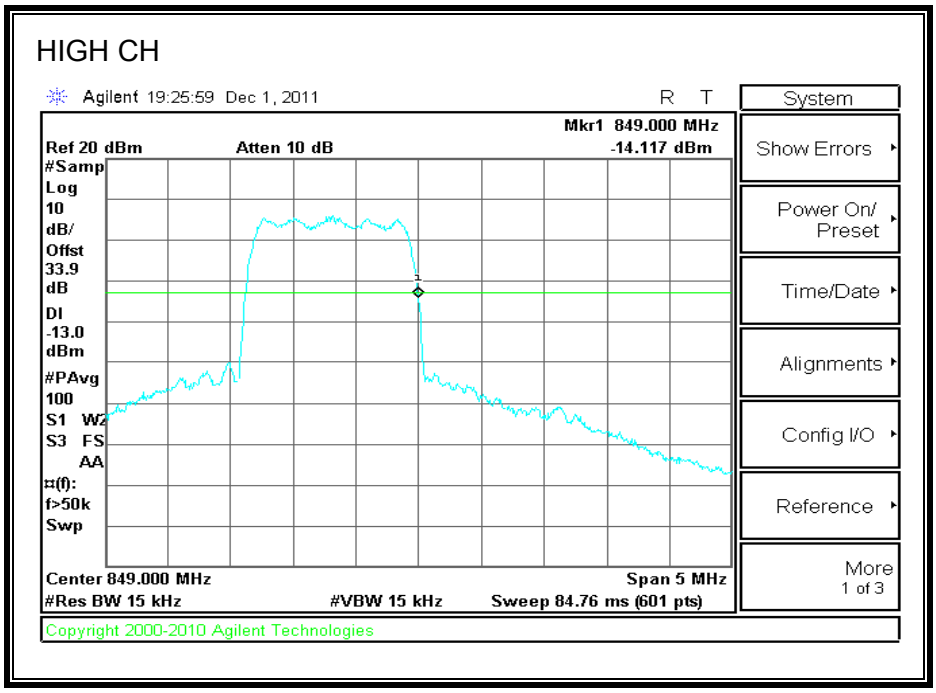
1xRTT 850 BAND

LOW CH



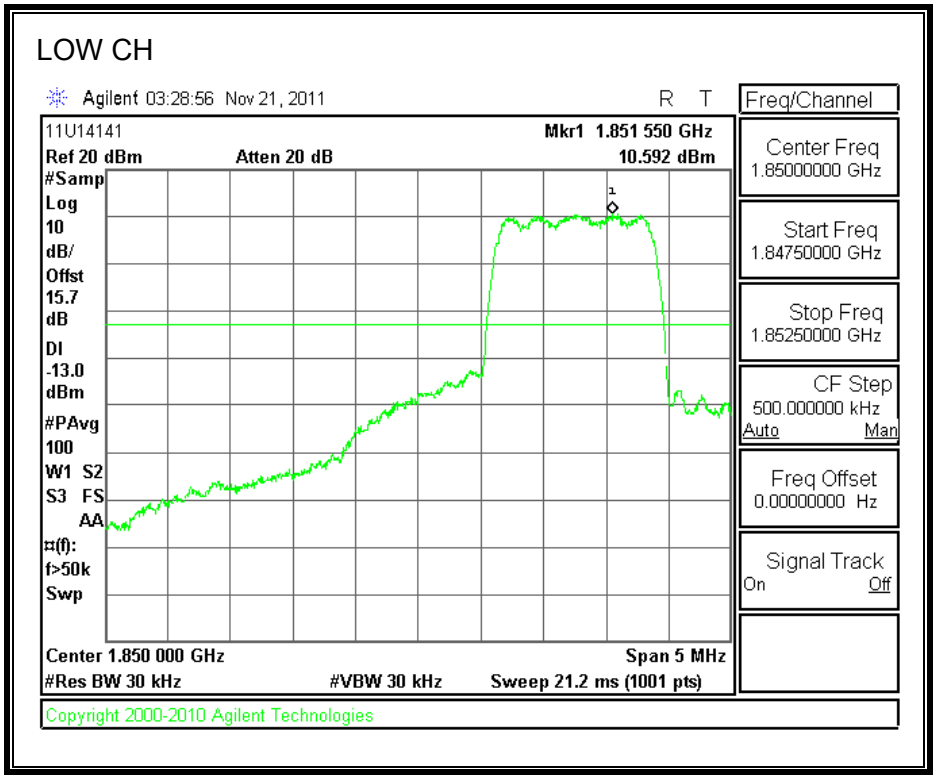
Note: Radiated emissions Band edge measurement method is applied for cell band at high channel.

HIGH CH

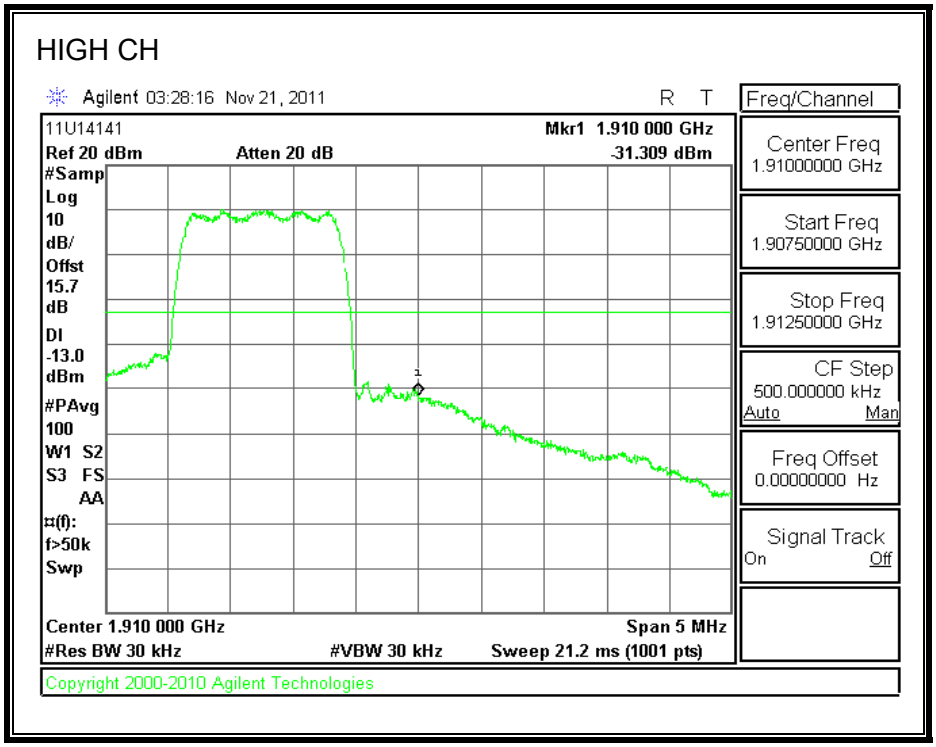


1xRTT 1900 BAND

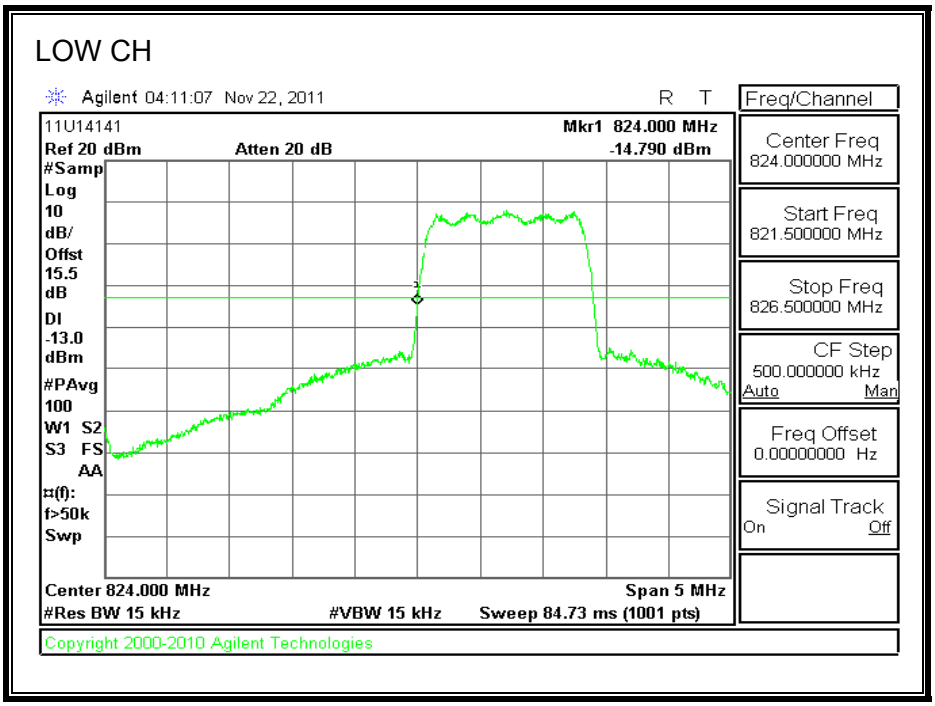
LOW CH



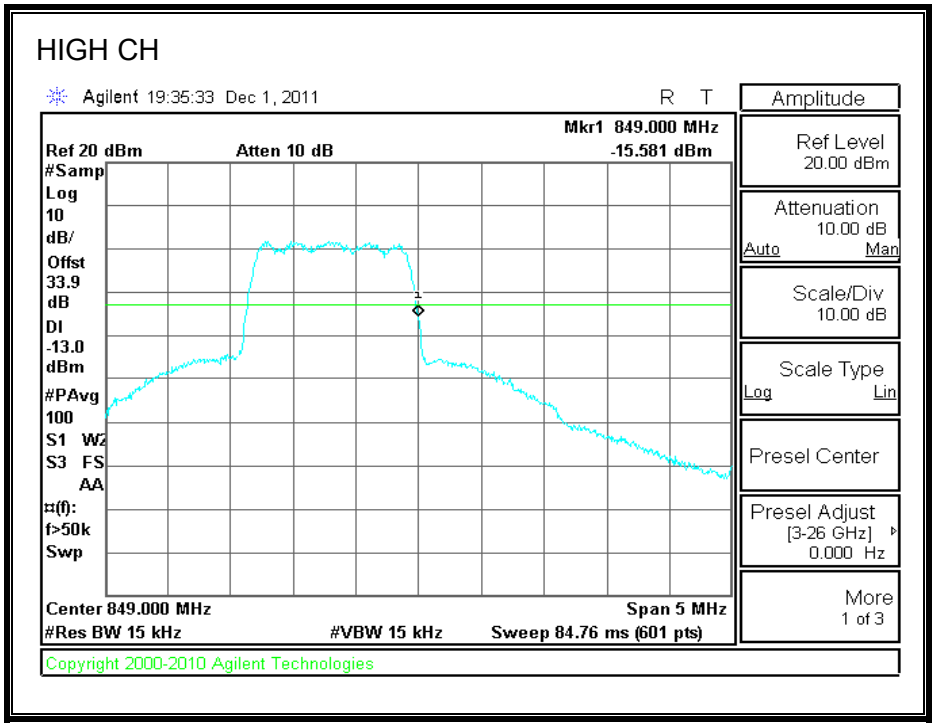
HIGH CH



EVDO REV A 850 BAND

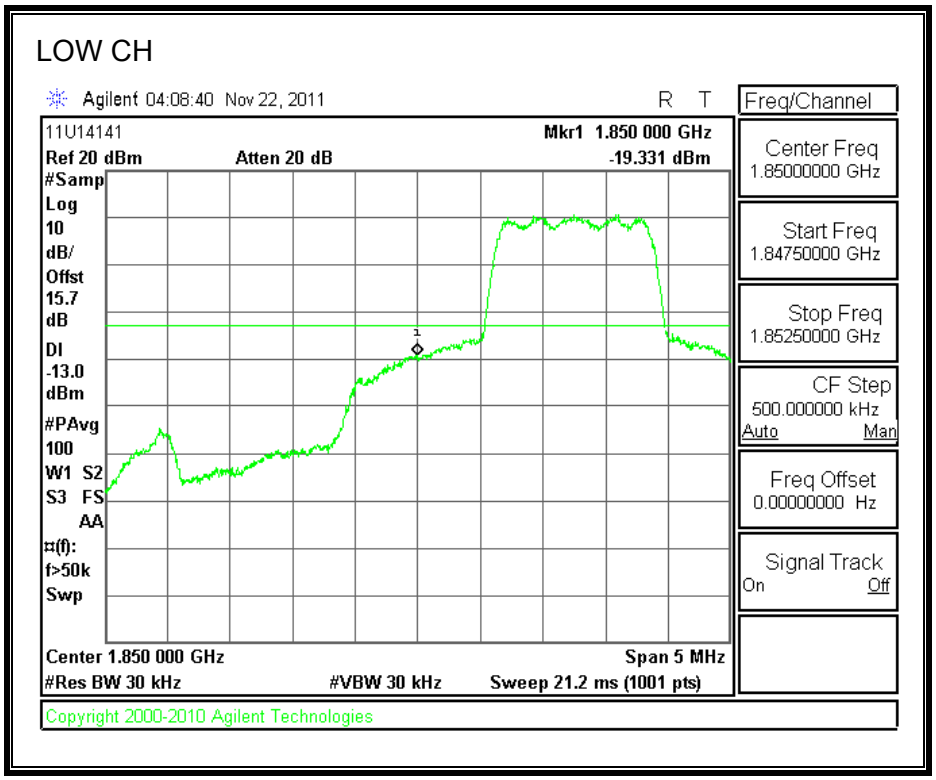


Note: Radiated emissions Band edge measurement method is applied for cell band at high channel.

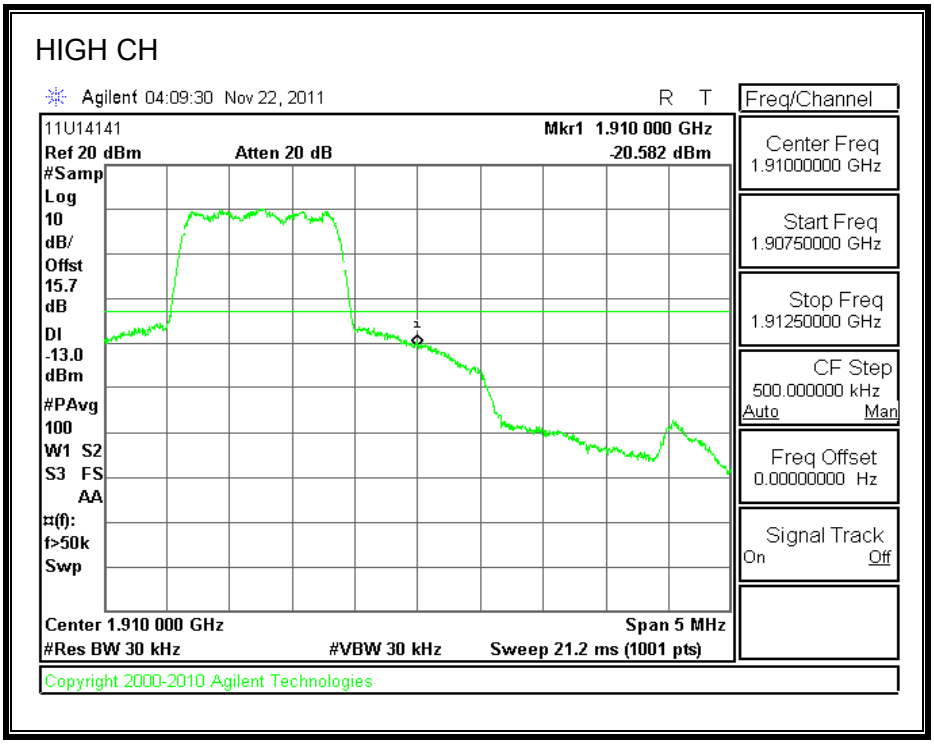


EVDO REV A 1900 BAND

LOW CH



HIGH CH



8.3. OUT OF BAND EMISSIONS

RULE PART(S)

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

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.

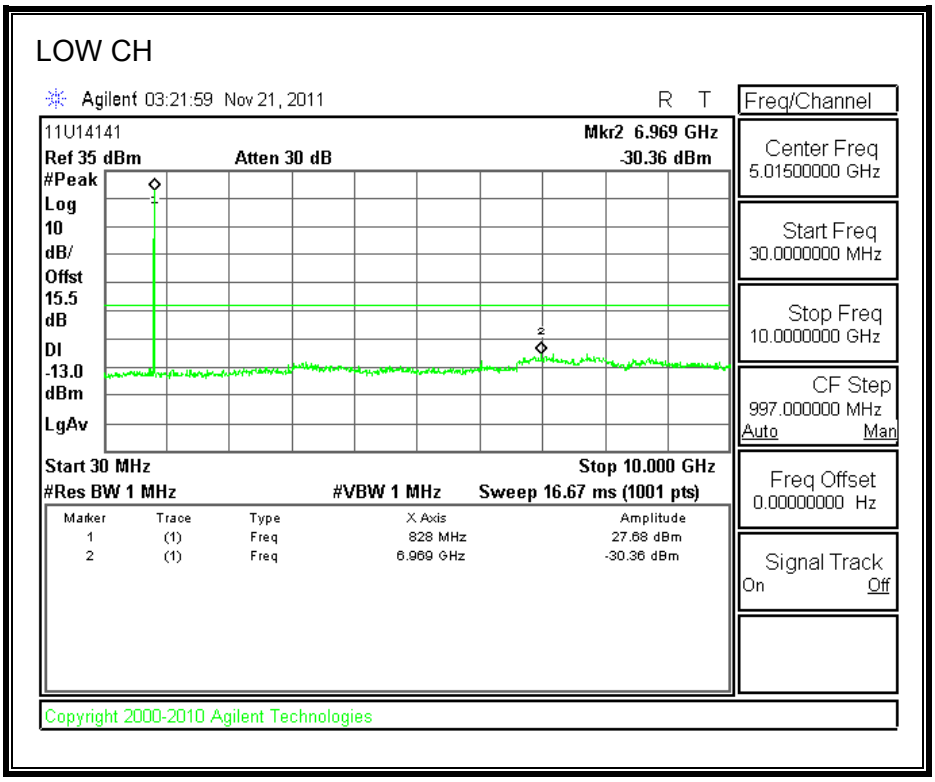
MODES TESTED

- CDMA 2000 1xRTT
- CDMA 2000 EVDO REV. A

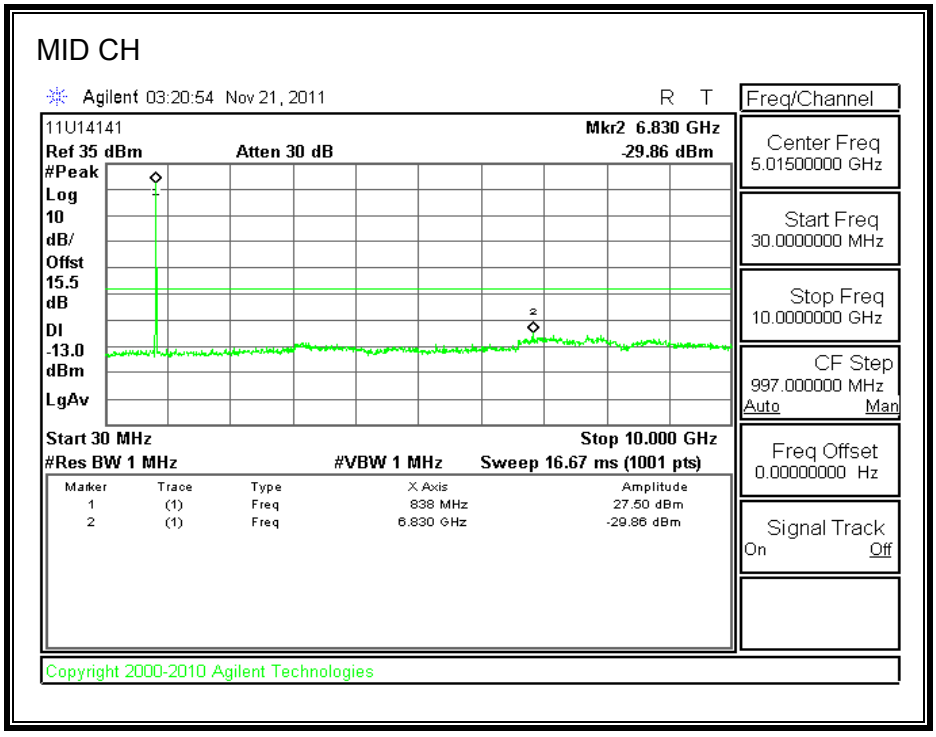
RESULTS

1xRTT 850 BAND

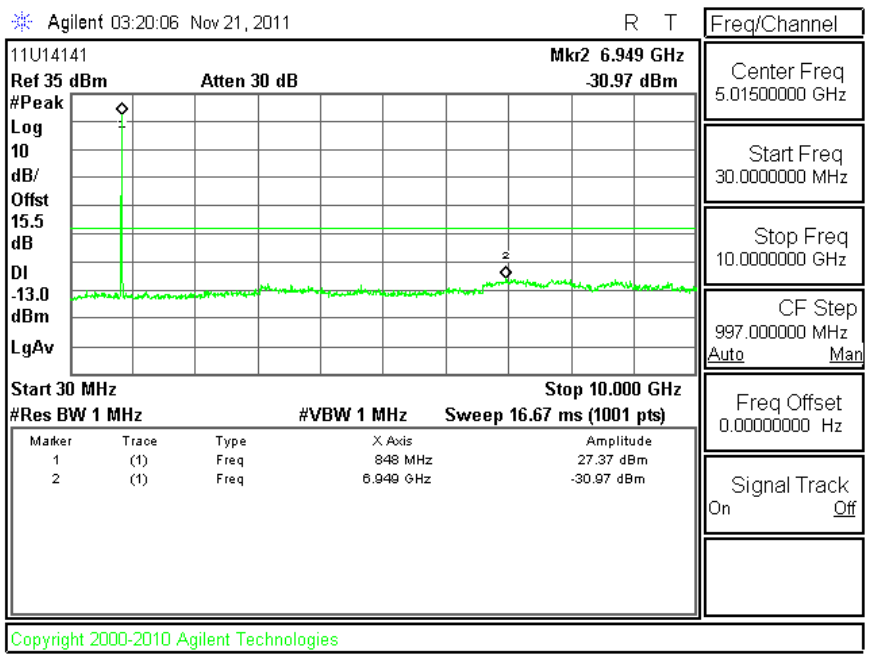
LOW CH



MID CH

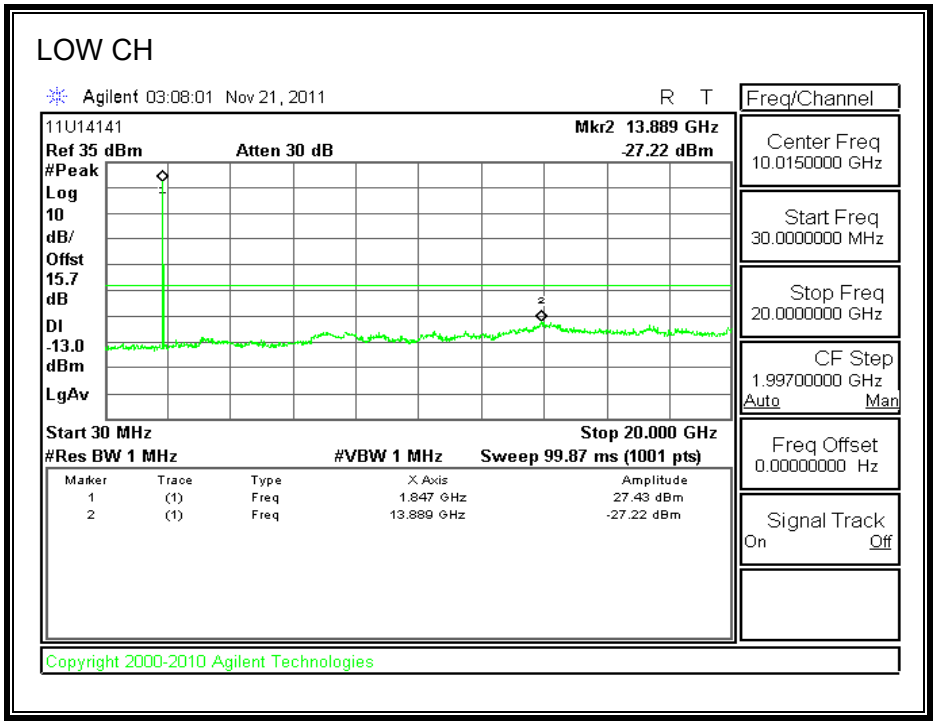


HIGH CH

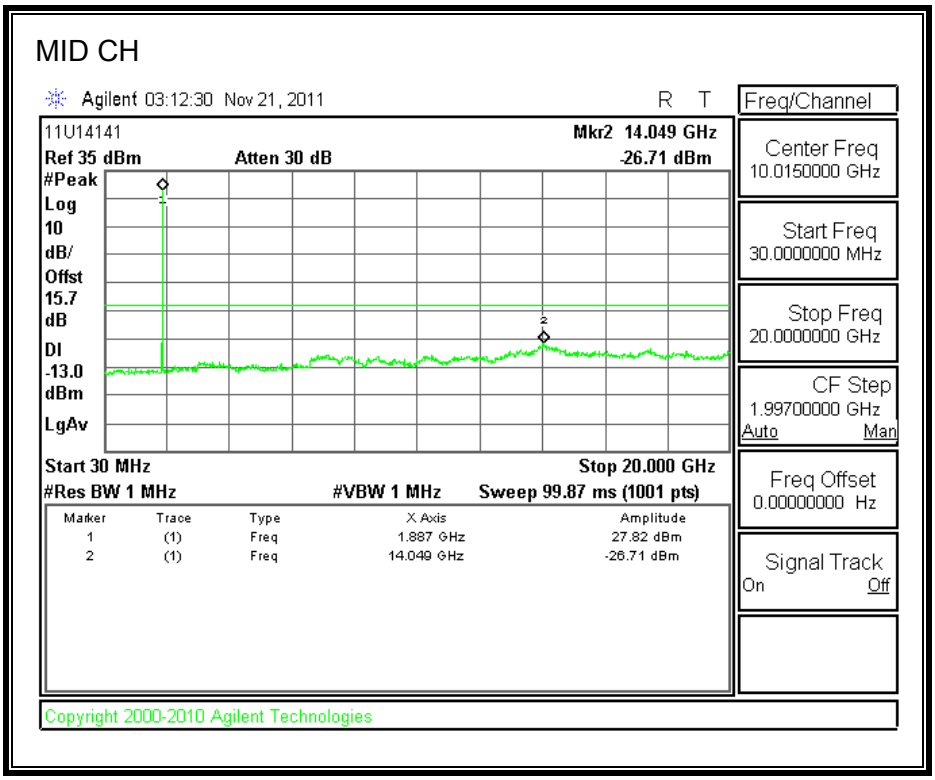


1xRTT 1900 BAND

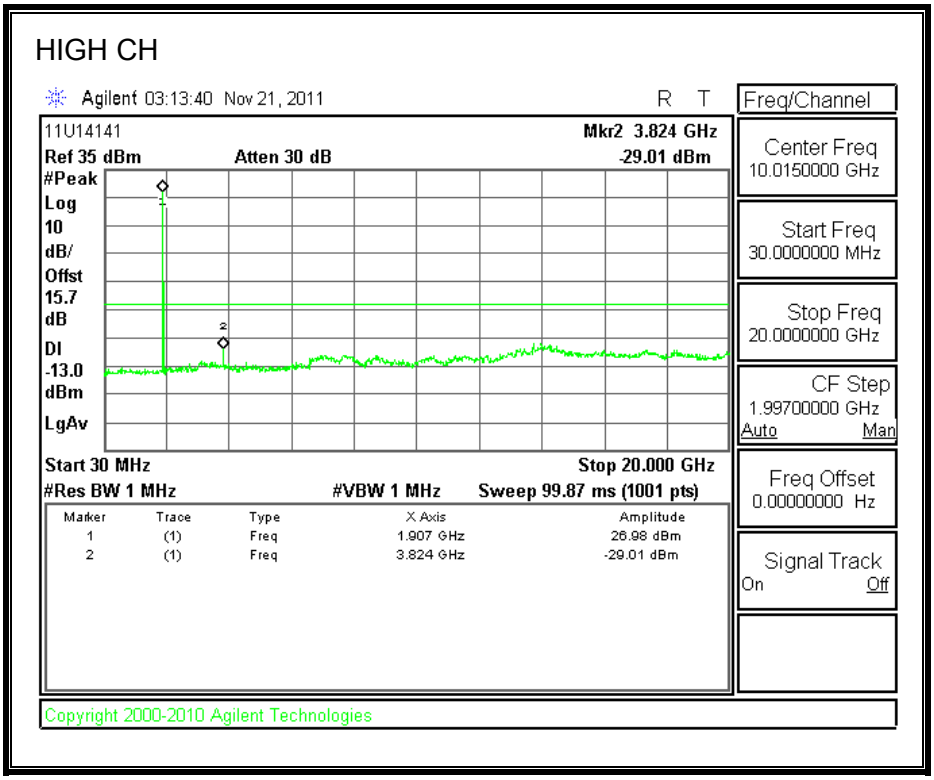
LOW CH



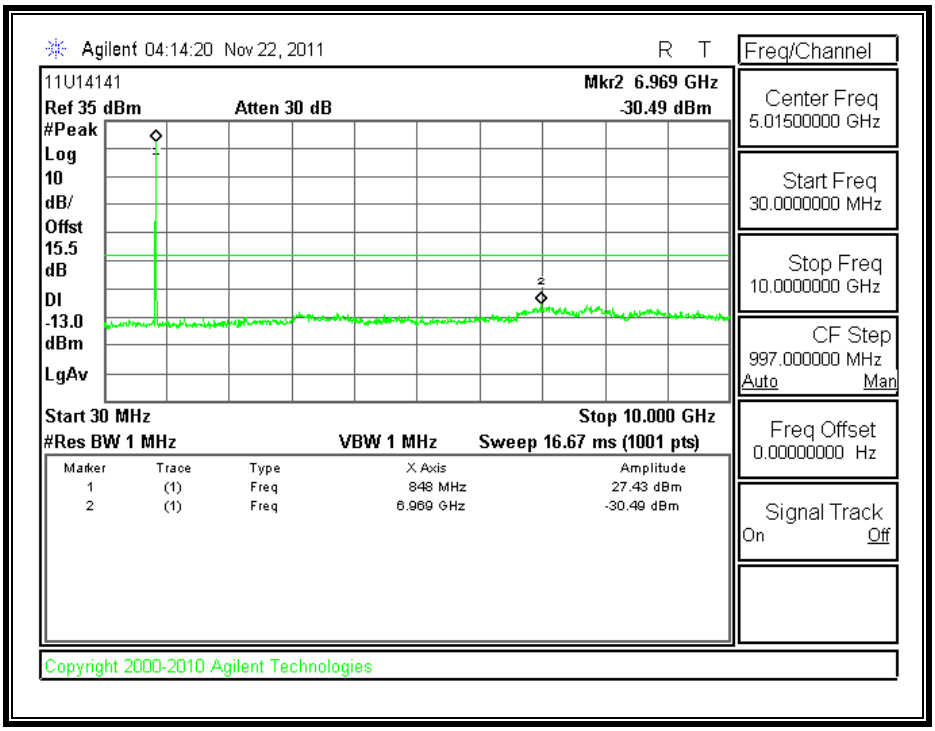
MID CH

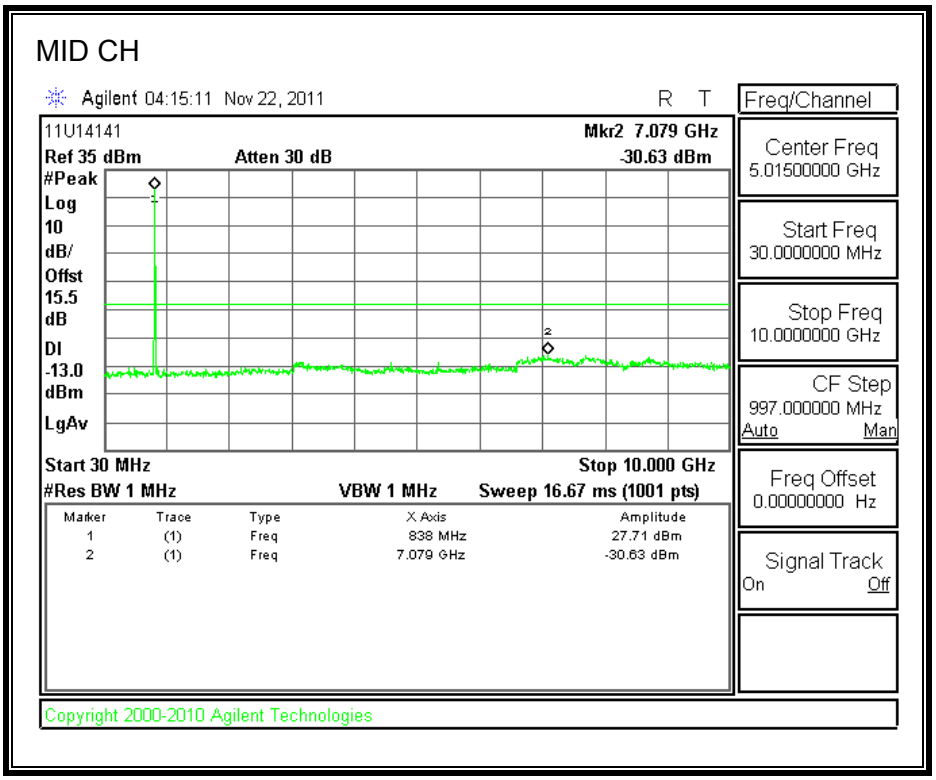


HIGH CH

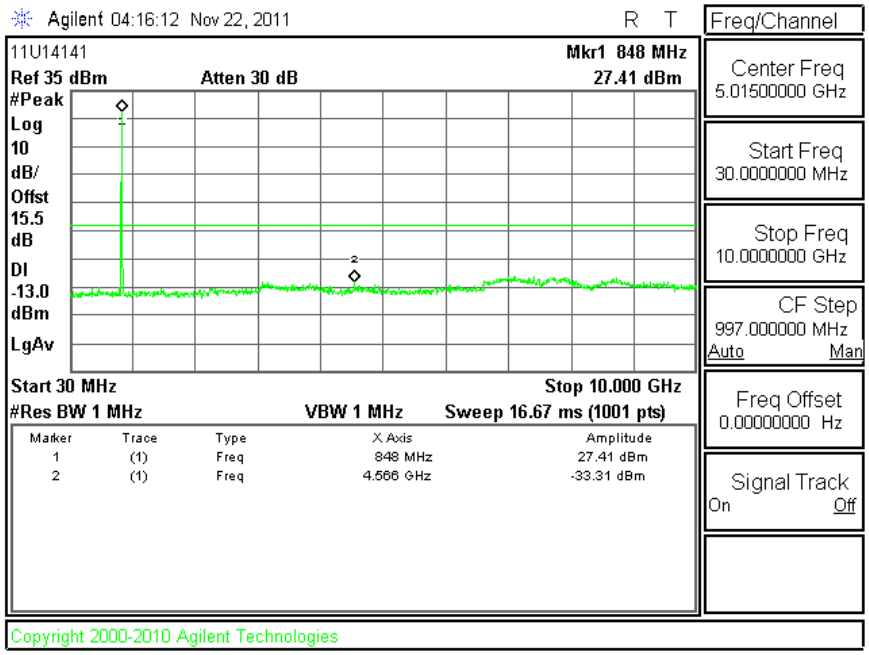


EVDO REV A 850 BAND

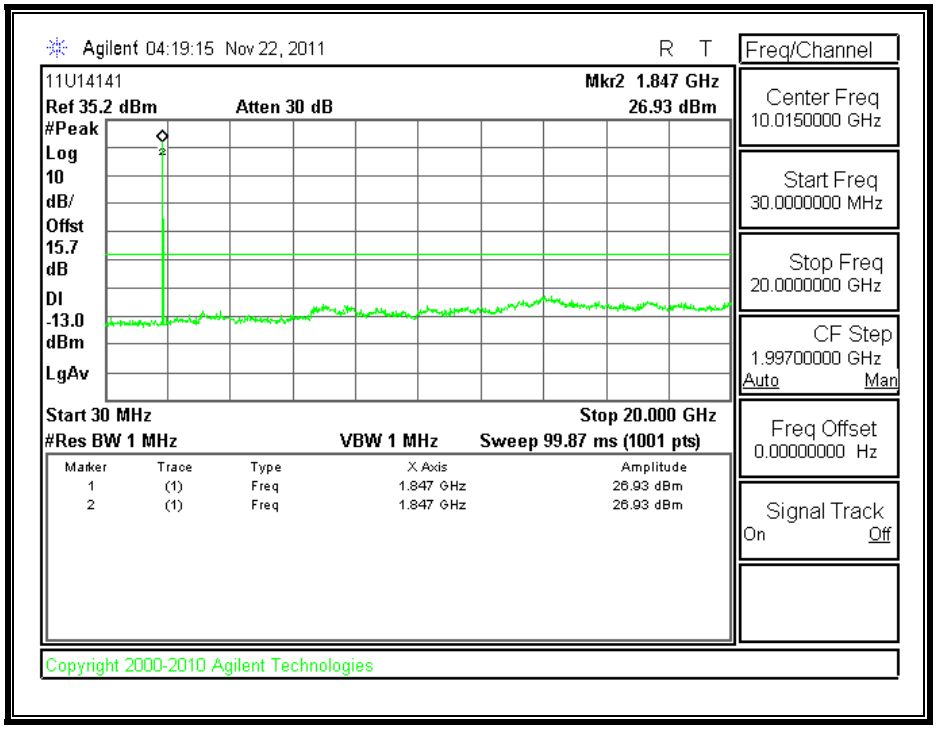


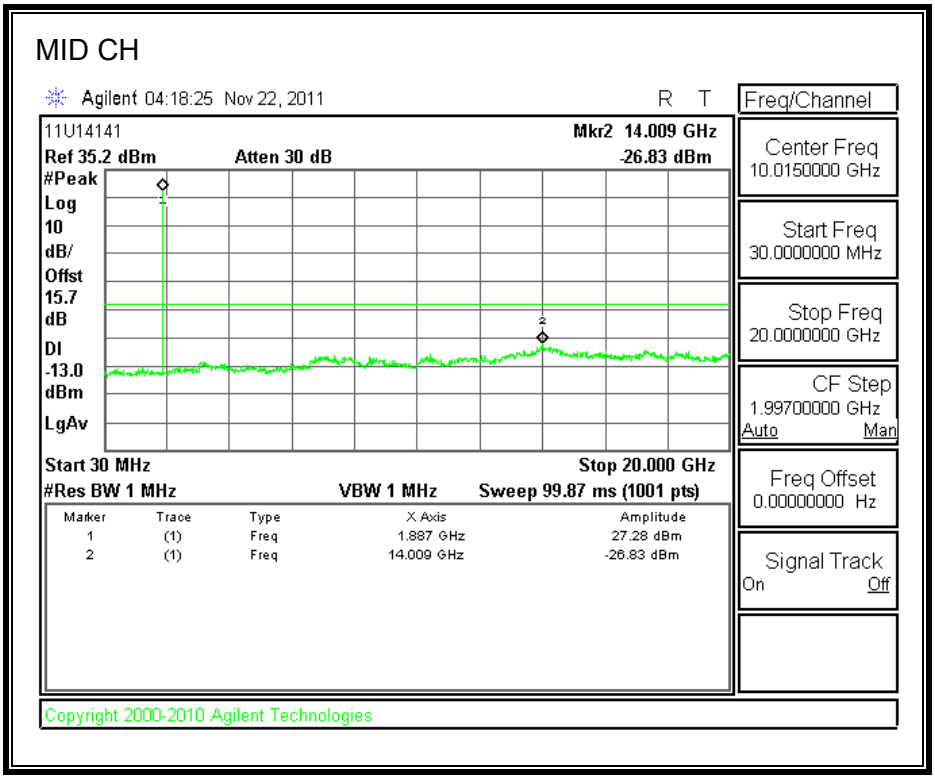


HIGH CH

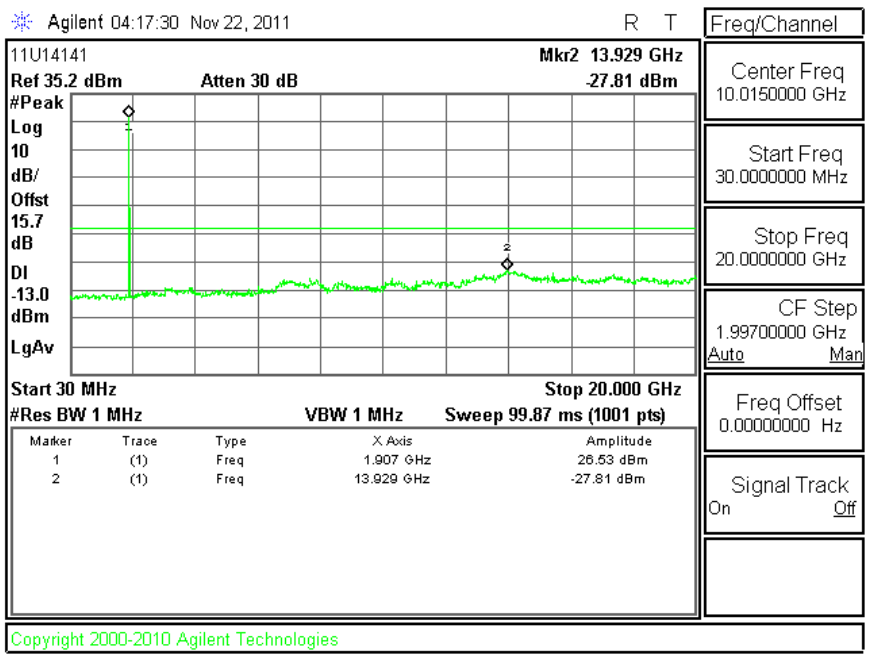


EVDO REV A 1900 BAND





HIGH CH



8.4. FREQUENCY STABILITY

RULE PART(S)

FCC: §2.1055, §22.355, §24.235.

LIMITS

§22.355 & RSS-132 4.3 - The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations.

RSS-133 6.3 - The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations.

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

TEST PROCEDURE

Use Agilent 8960 and CMW 500 with Frequency Error measurement capability.

- Temp. = −30° to +50°C
- Voltage = 3.7Vdc (85% - 115%)

Frequency Stability vs Temperature:
The EUT is place inside a temperature chamber. The temperature is set to 20ºC 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 +50ºC is reached.

Frequency Stability vs Voltage:
The peak frequency error is recorded (worst-case).

MODES TESTED

- CDMA 2000 1xRTT
- CDMA 2000 EVDO REV. A

RESULTS

See the following pages.

CELL, 1xRTT MODULATION – MID CHANNEL

Reference Frequency: Cellular Mid Channel 836.5200000MHz @ 20°C Limit: to stay +- 2.5 ppm = 2091.300 Hz				
Power Supply	Environment	Frequency Deviation Measureed with Time Elapse		
(Vdc)	Temperature (°C)	(MHz)	Delta (ppm)	Limit (ppm)
3.70	50	836.520015	-0.018	2.5
3.70	40	836.520010	-0.012	2.5
3.70	30	836.520007	-0.008	2.5
3.70	***20***	***836.520000***	***0***	2.5
3.70	10	836.519999	0.001	2.5
3.70	0	836.519997	0.004	2.5
3.70	-10	836.519992	0.010	2.5
3.70	-20	836.519990	0.012	2.5
3.70	-30	836.519988	0.014	2.5

Reference Frequency: Cellular Mid Channel 836.5200000MHz @ 20°C Limit: to stay +- 2.5 ppm = 2091.300 Hz				
Power Supply	Environment	Frequency Deviation Measureed with Time Elapse		
(Vdc)	Temperature (°C)	(MHz)	Delta (ppm)	Limit (ppm)
3.70	***20***	***836.520000***	***0***	***2.5***
3.50	20	836.520006	*-0.007*	2.5
4.26	20	836.519993	*0.008*	2.5

PCS, 1xRTT MODULATION – MID CHANNEL

Reference Frequency: PCS Mid Channel 1880.000000MHz @ 20ºC Limit: within the authorized block or +- 2.5 ppm = 4700.000 Hz				
Power Supply	Environment	Frequency Deviation Measureed with Time Elapse		
(Vdc)	Temperature (*C)	(MHz)	Delta (ppm)	Limit (ppm)
3.70	50	1879.999997	0.002	2.5
3.70	40	1879.999996	0.002	2.5
3.70	30	1879.999993	0.004	2.5
3.70	***20***	***1880.000000***	***0***	***2.5***
3.70	10	1880.000002	-0.001	2.5
3.70	0	1880.000004	-0.002	2.5
3.70	-10	1880.000008	-0.004	2.5
3.70	-20	1880.000013	-0.007	2.5
3.70	-30	1880.000012	-0.006	2.5

Reference Frequency: PCS Mid Channel 1880.000000MHz @ 20ºC Limit: within the authorized block or +- 2.5 ppm = 4700.000 Hz				
Power Supply	Environment	Frequency Deviation Measureed with Time Elapse		
(Vdc)	Temperature (*C)	(MHz)	Delta (ppm)	Limit (ppm)
3.70	***20***	***1880.000000***	***0***	***2.5***
3.50	20	1879.999999	*0.001*	2.5
4.26	20	1880.000009	*-0.005*	2.5

CELL, EVDO REV. A – MID CHANNEL

Reference Frequency: CELL Mid Channel 836.520000MHz @ 20ºC Limit: within the authorized block or +- 2.5 ppm = 2091.300 Hz				
Power Supply	Environment	Frequency Deviation Measureed with Time Elapse		
(Vdc)	Temperature (*C)	(MHz)	Delta (ppm)	Limit (ppm)
3.70	50	836.520007	-0.008	2.5
3.70	40	836.520002	-0.002	2.5
3.70	30	836.520001	-0.001	2.5
3.70	***20***	***836.520000***	***0***	***2.5***
3.70	10	836.519999	0.001	2.5
3.70	0	836.519997	0.004	2.5
3.70	-10	836.519990	0.012	2.5
3.70	-20	836.519895	0.126	2.5
3.70	-30	836.519988	0.014	2.5

Reference Frequency: CELL Mid Channel 836.520000MHz @ 20ºC Limit: within the authorized block or +- 2.5 ppm = 2091.300 Hz				
Power Supply	Environment	Frequency Deviation Measureed with Time Elapse		
(Vac)	Temperature (*C)	(MHz)	Delta (ppm)	Limit (ppm)
3.70	***20***	***836.520000***	***0***	***2.5***
3.50	20	836.520006	*-0.007*	2.5
4.26	20	836.519999	*0.001*	2.5

PCS, EVDO REV. A - MID CHANNEL

Reference Frequency: PCS Mid Channel 1880.000000MHz @ 20ºC Limit: within the authorized block or +- 2.5 ppm = 4700.000 Hz				
Power Supply	Environment	Frequency Deviation Measureed with Time Elapse		
(Vdc)	Temperature (ºC)	(MHz)	Delta (ppm)	Limit (ppm)
3.70	50	1879.999997	0.002	2.5
3.70	40	1879.999996	0.002	2.5
3.70	30	1879.999993	0.004	2.5
3.70	***20***	***1880.000000***	***0***	***2.5***
3.70	10	1880.000002	-0.001	2.5
3.70	0	1880.000008	-0.004	2.5
3.70	-10	1880.000014	-0.007	2.5
3.70	-20	1880.000023	-0.012	2.5
3.70	-30	1880.000024	-0.013	2.5

Reference Frequency: PCS Mid Channel 1880.000000MHz @ 20ºC Limit: within the authorized block or +- 2.5 ppm = 4700.000 Hz				
Power Supply	Environment	Frequency Deviation Measureed with Time Elapse		
(Vdc)	Temperature (ºC)	(MHz)	Delta (ppm)	Limit (ppm)
3.70	***20***	***1880.000000***	***0***	***2.5***
3.50	20	1880.000020	-0.011	2.5
4.26	20	1879.999999	0.001	2.5

9. RADIATED TEST RESULTS

9.1. RADIATED POWER (ERP & EIRP)

RULE PART(S)

FCC: §2.1046, §22.913, §24.232.

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.

1. Power is given in terms of effective radiated power (ERP).

2. Applicants in the Los Angeles, CA, area who demonstrate a need to serve both the downtown and fringe areas will be permitted to utilize an ERP of 1 kw at the following mountaintop sites: Santiago Park, Sierra Peak, Mount Lukens, and Mount Wilson.

3. Stations with antennas below 305 m (1,000 ft) (AAT) will be restricted to a maximum power of 1 kw (ERP).

TEST PROCEDURE

ANSI / TIA / EIA 603C Clause 2.2.17

KDB 971168 D01 Procedures for Compliance Measurement of the Fundamental Emission Power of Licensed Wideband (> 1 MHz) Digital Transmission Systems.

MODES TESTED

- CDMA 2000 1xRTT
- CDMA 2000 EVDO REV. A

RESULTS

STANDARD COVER

CELLULAR BAND (ERP)

Mode	Channel	f (MHz)	ERP	
			dBm	mW
1xRTT	1013	824.70	26.30	426.58
	384	836.60	**26.32**	428.55
	777	848.31	26.00	398.11
EVDO REV. A	1013	824.70	19.50	89.13
	384	836.60	**20.30**	107.15
	777	848.31	18.81	76.03

PCS BAND (EIRP)

Mode	Channel	f (MHz)	EIRP	
			dBm	mW
1xRTT	25	1851.25	31.85	1531.09
	600	1880.00	**32.23**	1671.09
	1175	1908.75	30.88	1224.62
EVDO REV. A	25	1851.25	22.95	197.24
	600	1880.00	**23.14**	206.06
	1175	1908.75	22.39	173.38

ERP 1xRTT 850 BAND

High Frequency Substitution Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS INC
Project #: 11U14141
Date: 11/28/11
Test Engineer: Chin Pang
Configuration: EUT ALONE
Mode: TX, CELL BAND CDMA MODE, 1xRTT

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
Low Ch								
824.70	26.80	V	0.5	0.0	26.30	38.5	-12.1	
824.70	22.50	H	0.5	0.0	22.00	38.5	-16.4	
Mid Ch								
836.52	26.82	V	0.5	0.0	26.32	38.5	-12.1	
836.52	22.50	H	0.5	0.0	22.00	38.5	-16.4	
High Ch								
848.31	26.50	V	0.5	0.0	26.00	38.5	-12.4	
848.31	22.30	H	0.5	0.0	21.80	38.5	-16.6	

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EIRP 1xRTT 1900 BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG
Project #: 11U14141
Date: 11/28/11
Test Engineer: Chin Pang
Configuration: EUT only
Mode: TX, PCS BAND CDMA 2000, 1xRTT
Peak

Test Equipment:
Receiving: Horn T73, and Camber B SMA Cables
Substitution: Horn T60 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	24.4	V	0.85	8.30	31.85	33.0	-1.2	
1.851	13.8	H	0.85	8.27	21.22	33.0	-11.8	
Mid Ch								
1.880	24.9	V	0.85	8.18	32.23	33.0	-0.8	
1.880	13.8	H	0.85	8.19	21.14	33.0	-11.9	
High Ch								
1.909	23.6	V	0.85	8.13	30.88	33.0	-2.1	
1.909	13.5	H	0.85	8.17	20.82	33.0	-12.2	

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EIRP EVDO REV A 850 BAND

High Frequency Substitution Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS INC
Project #: 11U14141
Date: 11/28/11
Test Engineer: Chin Pang
Configuration: EUT ALONE
Mode: TX, CELL BAND CDMA MODE, EVDO Rev A
Peak Detector

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
Low Ch								
824.70	20.00	V	0.5	0.0	19.50	38.5	-18.9	
824.70	17.50	H	0.5	0.0	17.00	38.5	-21.4	
Mid Ch								
836.52	20.80	V	0.5	0.0	20.30	38.5	-18.1	
836.52	18.20	H	0.5	0.0	17.70	38.5	-20.7	
High Ch								
848.31	19.31	V	0.5	0.0	18.81	38.5	-19.6	
848.31	15.90	H	0.5	0.0	15.40	38.5	-23.0	

Rev. 3.17.11

EIRP EVDO REV A 1900 BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber A

Company: LG
Project #: 11U14141
Date: 11/28/11
Test Engineer: Chin Pang
Configuration: EUT only
Mode: TX, PCS BAND CDMA 2000, EVDO Rev A
Peak Detector

Test Equipment:
Receiving: Horn T73, and Camber B SMA Cables
Substitution: Horn T60 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	15.5	V	0.85	8.30	22.95	33.0	-10.1	
1.851	8.4	H	0.85	8.27	15.82	33.0	-17.2	
Mid Ch								
1.880	15.8	V	0.85	8.19	23.14	33.0	-9.9	
1.880	9.8	H	0.85	8.20	17.15	33.0	-15.9	
High Ch								
1.909	15.1	V	0.85	8.14	22.39	33.0	-10.6	
1.909	8.3	H	0.85	8.17	15.62	33.0	-17.4	

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INDUCTIVE COVER

CELLULAR BAND (ERP)

Mode	Channel	f (MHz)	ERP	
			dBm	mW
1xRTT	1013	824.70	28.31	677.64
	384	836.60	**27.54**	567.54
	777	848.31	27.02	503.50
EVDO REV. A	1013	824.70	20.94	124.17
	384	836.60	**21.39**	137.72
	777	848.31	20.80	120.23

PCS BAND (EIRP)

Mode	Channel	f (MHz)	EIRP	
			dBm	mW
1xRTT	25	1851.25	28.11	647.14
	600	1880.00	**29.52**	895.36
	1175	1908.75	28.04	636.80
EVDO REV. A	25	1851.25	**23.52**	224.91
	600	1880.00	23.28	212.81
	1175	1908.75	22.68	185.35

ERP 1xRTT 850 BAND

High Frequency Substitution Measurement
Compliance Certification Services Chamber A

Company: LG ELECTRONICS INC
Project #: 11U14141
Date: 12/19/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE COVER
Mode: TX , CELL BAND 1xRTT MODE

Test Equipment:
Receiving: Sunol T122, and 3m Chamber N-type Cable (Setup this one for testing EUT)
Substitution: Dipole S/N: 00022117, 4ft SMA Cable (SN # 245182002) Warehouse.

f MHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBd)	ERP (dBm)	Limit (dBm)	Margin (dB)	Notes
824.70	28.81	V	0.5	0.0	28.31	38.5	-10.1	
824.70	20.80	H	0.5	0.0	20.30	38.5	-18.1	
836.52	28.04	V	0.5	0.0	27.54	38.5	-10.9	
836.52	20.55	H	0.5	0.0	20.05	38.5	-18.4	
848.31	27.52	V	0.5	0.0	27.02	38.5	-11.4	
848.31	19.57	H	0.5	0.0	19.07	38.5	-19.4	

Rev. 3.17.11

EIRP 1xRTT 1900 BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS INC
Project #: 11U14141
Date: 12/19/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE COVER
Mode: TX, PCS BAND CDMA 2000, 1xRTT

Test Equipment:
Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T60 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.851	14.5	V	0.85	8.00	21.60	33.0	-11.4	
1.851	21.0	H	0.85	8.00	28.11	33.0	-4.9	
1.880	14.3	V	0.85	8.10	21.53	33.0	-11.5	
1.880	22.3	H	0.85	8.10	29.52	33.0	-3.5	
1.909	13.3	V	0.85	8.14	20.59	33.0	-12.4	
1.909	20.8	H	0.85	8.14	28.04	33.0	-5.0	

Rev. 3.17.11

EIRP EVDO REV A 850 BAND

High Frequency Substitution Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS INC
Project #: 11U14141
Date: 12/19/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE COVER
Mode: TX, CELL BAND EVDO REV A. 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
824.70	21.44	V	0.5	0.0	20.94	38.5	-17.5	
824.70	16.41	H	0.5	0.0	15.91	38.5	-22.5	
836.52	21.89	V	0.5	0.0	21.39	38.5	-17.1	
836.52	16.80	H	0.5	0.0	16.30	38.5	-22.2	
848.31	20.98	V	0.5	0.0	20.48	38.5	-18.0	
848.31	15.63	H	0.5	0.0	15.13	38.5	-23.3	

Rev. 3.17.11

EIRP EVDO REV A 1900 BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS INC
Project #: 11U14141
Date: 12/19/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE COVER
Mode: TX, PCS BAND CDMA 2000, EVDO REV A

Test Equipment:
Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T60 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.851	10.2	V	0.85	8.00	17.32	33.0	-15.7	
1.851	16.4	H	0.85	8.00	23.52	33.0	-9.5	
1.880	10.0	V	0.85	8.10	17.23	33.0	-15.8	
1.880	16.0	H	0.85	8.10	23.28	33.0	-9.7	
1.909	9.9	V	0.85	8.14	17.21	33.0	-15.8	
1.909	15.4	H	0.85	8.14	22.68	33.0	-10.3	

Rev. 3.17.11

INDUCTIVE CHARGER WITH INDUCTIVE COVER

CELLULAR BAND (ERP)

Mode	Channel	f (MHz)	ERP	
			dBm	mW
1xRTT	1013	824.70	**23.58**	228.03
	384	836.60	22.49	177.42
	777	848.31	21.53	142.23
EVDO REV. A	1013	824.70	**17.15**	51.88
	384	836.60	14.36	27.29
	777	848.31	15.46	35.16

PCS BAND (EIRP)

Mode	Channel	f (MHz)	EIRP	
			dBm	mW
1xRTT	25	1851.25	27.66	583.45
	600	1880.00	**28.76**	751.62
	1175	1908.75	27.19	523.60
EVDO REV. A	25	1851.25	24.08	255.86
	600	1880.00	**25.22**	332.66
	1175	1908.75	23.58	228.03

ERP 1xRTT 850 BAND

High Frequency Substitution Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS INC
Project #: 11U14141
Date: 12/19/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE CHARGER
Mode: TX, CELL BAND 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
824.70	19.53	V	0.5	0.0	19.03	38.5	-19.4	
824.70	24.08	H	0.5	0.0	23.58	38.5	-14.9	
836.52	18.46	V	0.5	0.0	17.96	38.5	-20.5	
836.52	22.99	H	0.5	0.0	22.49	38.5	-16.0	
848.31	16.87	V	0.5	0.0	16.37	38.5	-22.1	
848.31	22.03	H	0.5	0.0	21.53	38.5	-16.9	

Rev. 3.17.11

EIRP 1xRTT 1900 BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS INC.
Project #: 11U14141
Date: 12/18/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT (INDUCTIVE CHARGER)
Mode: TX, PCS BAND CDMA 2000, 1xRTT

Test Equipment:
Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T60 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
1.851	13.9	V	0.85	8.00	21.05	33.0	-12.0	
1.851	20.5	H	0.85	8.00	27.66	33.0	-5.3	
1.880	13.2	V	0.85	8.10	20.49	33.0	-12.5	
1.880	21.5	H	0.85	8.10	28.76	33.0	-4.2	
1.909	11.9	V	0.85	8.14	19.21	33.0	-13.8	
1.909	19.9	H	0.85	8.14	27.19	33.0	-5.8	

Rev. 3.17.11

EIRP EVDO REV A 850 BAND

High Frequency Substitution Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS INC
Project #: 11U14141
Date: 12/19/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE CHARGER
Mode: TX, CELL BAND EVDO REV A. 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
824.70	16.02	V	0.5	0.0	15.52	38.5	-22.9	
824.70	17.65	H	0.5	0.0	17.15	38.5	-21.3	
836.52	13.89	V	0.5	0.0	13.39	38.5	-25.1	
836.52	14.86	H	0.5	0.0	14.36	38.5	-24.1	
848.31	14.93	V	0.5	0.0	14.43	38.5	-24.0	
848.31	15.96	H	0.5	0.0	15.46	38.5	-23.0	

Rev. 3.17.11

EIRP EVDO REV A 1900 BAND

High Frequency Fundamental Measurement
Compliance Certification Services Chamber B

Company: LG ELECTRONICS INC.
Project #: 11U14141
Date: 12/18/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT (INDUCTIVE CHARGER)
Mode: TX, PCS BAND CDMA 2000, EVDO REV A.

Test Equipment:
Receiving: Horn T59, and Camber B SMA Cables
Substitution: Horn T60 Substitution, 6ft SMA Cable (208947003) Warehouse

f GHz	SG reading (dBm)	Ant. Pol. (H/V)	Cable Loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Delta (dB)	Notes
Low Ch								
1.851	11.8	V	0.85	8.00	18.93	33.0	-14.1	
1.851	16.9	H	0.85	8.00	24.08	33.0	-8.9	
1.880	12.9	V	0.85	8.10	20.10	33.0	-12.9	
1.880	18.0	H	0.85	8.10	25.22	33.0	-7.8	
High Ch								
1.909	11.7	V	0.85	8.14	19.00	33.0	-14.0	
1.909	16.3	H	0.85	8.14	23.58	33.0	-9.4	

Rev. 3.17.11

9.1. FIELD STRENGTH OF SPURIOUS RADIATION

RULE PART(S)

FCC: §2.1053, §22.917, §24.238

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.

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

- CDMA 2000 1xRTT
- CDMA 2000 EVDO REV. A

RESULTS

STANDARD COVER

ERP 1xRTT 850 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 11U14141
Date: 11/23/11
Test Engineer: TOM CHEN
Configuration: EUT ALONE
Mode: TX, CELL BAND CDMA 1xRTT MODE

Chamber	Pre-amplifer	Filter	Limit
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
Low Ch, 824.70MHz									
1.649	-8.5	V	3.0	38.2	1.0	-45.7	-13.0	-32.7	
2.474	-18.0	V	3.0	37.5	1.0	-54.5	-13.0	-41.5	
1.649	-6.9	H	3.0	38.2	1.0	-44.1	-13.0	-31.1	
2.474	-18.5	H	3.0	37.5	1.0	-55.0	-13.0	-42.0	
Mid Ch, 836.52MHz									
1.673	-8.2	V	3.0	38.1	1.0	-45.3	-13.0	-32.3	
2.510	-21.4	V	3.0	37.5	1.0	-57.8	-13.0	-44.8	
1.673	-6.4	H	3.0	38.1	1.0	-43.5	-13.0	-30.5	
2.510	-20.2	H	3.0	37.5	1.0	-56.6	-13.0	-43.6	
High Ch, 848.31MHz									
1.697	-8.1	V	3.0	38.1	1.0	-45.2	-13.0	-32.2	
2.545	-22.9	V	3.0	37.5	1.0	-59.4	-13.0	-46.4	
1.697	-6.2	H	3.0	38.1	1.0	-43.3	-13.0	-30.3	
2.545	-19.1	H	3.0	37.5	1.0	-55.6	-13.0	-42.6	

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

EIRP 1xRTT 1900 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 11U14141
Date: 11/23/11
Test Engineer: TOM CHEN
Configuration: EUT ALONE
Mode: TX, PCS BAND CDMA 1xRTT MODE

Chamber	Pre-amplifer	Filter	Limit
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
Low Ch, 1851.25MHz									
3.703	-3.4	V	3.0	36.8	1.0	-39.2	-13.0	-26.2	
5.554	-3.8	V	3.0	36.3	1.0	-39.1	-13.0	-26.1	
3.703	-2.2	H	3.0	36.8	1.0	-38.0	-13.0	-25.0	
5.554	-0.7	H	3.0	36.3	1.0	-36.0	-13.0	-23.0	
Mid Ch, 1880.00MHz									
3.760	-2.7	V	3.0	36.8	1.0	-38.4	-13.0	-25.4	
5.640	-2.9	V	3.0	36.3	1.0	-38.2	-13.0	-25.2	
3.760	3.8	H	3.0	36.8	1.0	-32.0	-13.0	-19.0	
5.640	-2.2	H	3.0	36.3	1.0	-37.5	-13.0	-24.5	
High Ch, 1908.75MHz									
3.818	-2.0	V	3.0	36.7	1.0	-37.7	-13.0	-24.7	
5.726	-2.0	V	3.0	36.3	1.0	-37.3	-13.0	-24.3	
3.818	-3.4	H	3.0	36.7	1.0	-39.1	-13.0	-26.1	
5.726	-2.1	H	3.0	36.3	1.0	-37.4	-13.0	-24.4	

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

EIRP EVDO REV. A. 850 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 11U14141
Date: 11/23/11
Test Engineer: TOM CHEN
Configuration: EUT ALONE
Mode: TX, CELL BAND CDMA2000 EVDO REV A

Chamber	Pre-amplifer	Filter	Limit
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
Low Ch, 824.70MHz									
1.649	-19.1	V	3.0	38.2	1.0	-56.2	-13.0	-43.2	
2.474	-21.4	V	3.0	37.5	1.0	-57.9	-13.0	-44.9	
1.649	-18.6	H	3.0	38.2	1.0	-55.7	-13.0	-42.7	
2.474	-22.0	H	3.0	37.5	1.0	-58.5	-13.0	-45.5	
Mid Ch, 836.52MHz									
1.673	-18.4	V	3.0	38.1	1.0	-55.6	-13.0	-42.6	
2.510	-22.3	V	3.0	37.5	1.0	-58.8	-13.0	-45.8	
1.673	-19.0	H	3.0	38.1	1.0	-56.1	-13.0	-43.1	
2.510	-23.3	H	3.0	37.5	1.0	-59.8	-13.0	-46.8	
High Ch, 848.31MHz									
1.697	-21.4	V	3.0	38.1	1.0	-58.5	-13.0	-45.5	
2.545	-22.5	V	3.0	37.5	1.0	-59.0	-13.0	-46.0	
1.697	-20.3	H	3.0	38.1	1.0	-57.4	-13.0	-44.4	
2.545	-24.5	H	3.0	37.5	1.0	-61.0	-13.0	-48.0	

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

EIRP EVDO REV. A 1900 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 11U14141
Date: 11/23/11
Test Engineer: TOM CHEN
Configuration: EUT ALONE
Mode: TX, PCS BAND CDMA2000 EVDO REV A

Chamber	Pre-amplifer	Filter	Limit
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
Low Ch, 1851.25MHz									
3.703	-13.8	V	3.0	36.8	1.0	-49.6	-13.0	-36.6	
5.554	-18.8	V	3.0	36.3	1.0	-54.1	-13.0	-41.1	
7.405	-13.7	V	3.0	36.6	1.0	-49.3	-13.0	-36.3	
3.703	-10.3	H	3.0	36.8	1.0	-46.1	-13.0	-33.1	
5.554	-17.0	H	3.0	36.3	1.0	-52.3	-13.0	-39.3	
7.405	-14.5	H	3.0	36.6	1.0	-50.0	-13.0	-37.0	
Mid Ch, 1880.00MHz									
3.760	-4.3	V	3.0	36.8	1.0	-40.0	-13.0	-27.0	
5.640	-9.1	V	3.0	36.3	1.0	-44.4	-13.0	-31.4	
7.520	-11.8	V	3.0	36.6	1.0	-47.4	-13.0	-34.4	
3.760	0.5	H	3.0	36.8	1.0	-35.3	-13.0	-22.3	
5.640	-17.4	H	3.0	36.3	1.0	-52.7	-13.0	-39.7	
7.520	-13.7	H	3.0	36.6	1.0	-49.3	-13.0	-36.3	
High Ch, 1908.75MHz									
3.818	-6.8	V	3.0	36.7	1.0	-42.5	-13.0	-29.5	
5.726	-14.3	V	3.0	36.3	1.0	-49.6	-13.0	-36.6	
7.635	-14.9	V	3.0	36.6	1.0	-50.5	-13.0	-37.5	
3.818	-2.1	H	3.0	36.7	1.0	-37.8	-13.0	-24.8	
5.726	-17.3	H	3.0	36.3	1.0	-52.6	-13.0	-39.6	
7.635	-14.2	H	3.0	36.6	1.0	-49.8	-13.0	-36.8	

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

INDUCTIVE COVER

ERP 1xRTT 850 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 11U14141
Date: 12/20/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE COVER
Mode: TX, CELL BAND CDMA 1xRTT MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 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
Low Ch, 824.70MHz									
1.649	2.0	V	3.0	35.5	1.0	-32.6	-13.0	-19.6	
2.474	-6.7	V	3.0	35.4	1.0	-41.1	-13.0	-28.1	
3.299	-14.1	V	3.0	35.5	1.0	-48.7	-13.0	-35.7	
1.649	0.9	H	3.0	35.5	1.0	-33.7	-13.0	-20.7	
2.474	-0.7	H	3.0	35.4	1.0	-35.1	-13.0	-22.1	
3.299	41.7	H	3.0	35.5	1.0	7.1	-13.0	20.1	
Mid Ch, 836.52MHz									
1.673	-0.4	V	3.0	35.5	1.0	-34.9	-13.0	-21.9	
2.510	-4.7	V	3.0	35.4	1.0	-39.2	-13.0	-26.2	
3.346	-17.0	V	3.0	35.5	1.0	-51.5	-13.0	-38.5	
1.673	-0.8	H	3.0	35.5	1.0	-35.4	-13.0	-22.4	
2.510	-5.5	H	3.0	35.4	1.0	-39.9	-13.0	-26.9	
3.346	-18.2	H	3.0	35.5	1.0	-52.7	-13.0	-39.7	
High Ch, 848.31MHz									
1.697	-2.8	V	3.0	35.5	1.0	-37.3	-13.0	-24.3	
2.545	-6.2	V	3.0	35.4	1.0	-40.6	-13.0	-27.6	
3.393	-17.1	V	3.0	35.5	1.0	-51.6	-13.0	-38.6	
1.697	-0.3	H	3.0	35.5	1.0	-34.8	-13.0	-21.8	
2.545	-3.3	H	3.0	35.4	1.0	-37.7	-13.0	-24.7	
3.393	-17.1	H	3.0	35.5	1.0	-51.6	-13.0	-38.6	

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

EIRP 1xRTT 1900 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 11U14141
Date: 12/20/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE COVER
Mode: TX, PCS BAND CDMA 1xRTT MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 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
Low Ch, 1851.25MHz									
3.703	-12.4	V	3.0	35.4	1.0	-46.8	-13.0	-33.8	
5.554	-12.7	V	3.0	35.4	1.0	-47.1	-13.0	-34.1	
7.405	-7.8	V	3.0	35.7	1.0	-42.5	-13.0	-29.5	
9.256	-7.8	V	3.0	35.6	1.0	-42.3	-13.0	-29.3	
3.703	-14.8	H	3.0	35.4	1.0	-49.1	-13.0	-36.1	
5.554	-10.3	H	3.0	35.4	1.0	-44.7	-13.0	-31.7	
7.405	-6.9	H	3.0	35.7	1.0	-41.6	-13.0	-28.6	
9.256	-4.7	H	3.0	35.6	1.0	-39.3	-13.0	-26.3	
Mid Ch, 1880.00MHz									
3.760	-7.1	V	3.0	35.3	1.0	-41.5	-13.0	-28.5	
5.640	-14.5	V	3.0	35.4	1.0	-48.9	-13.0	-35.9	
7.520	-10.7	V	3.0	35.7	1.0	-45.4	-13.0	-32.4	
9.400	-13.3	V	3.0	35.6	1.0	-47.9	-13.0	-34.9	
3.760	-5.7	H	3.0	35.3	1.0	-40.0	-13.0	-27.0	
5.640	-14.7	H	3.0	35.4	1.0	-49.2	-13.0	-36.2	
7.520	-11.4	H	3.0	35.7	1.0	-46.1	-13.0	-33.1	
9.400	-12.1	H	3.0	35.6	1.0	-46.7	-13.0	-33.7	
High Ch, 1908.75MHz									
3.818	-7.9	V	3.0	35.3	1.0	-42.2	-13.0	-29.2	
5.726	-16.8	V	3.0	35.4	1.0	-51.3	-13.0	-38.3	
7.635	-17.0	V	3.0	35.7	1.0	-51.7	-13.0	-38.7	
9.544	-15.2	V	3.0	35.6	1.0	-49.8	-13.0	-36.8	
3.818	-10.4	H	3.0	35.3	1.0	-44.7	-13.0	-31.7	
5.726	-13.8	H	3.0	35.4	1.0	-48.3	-13.0	-35.3	
7.635	-14.7	H	3.0	35.7	1.0	-49.4	-13.0	-36.4	
9.544	-9.1	H	3.0	35.6	1.0	-43.6	-13.0	-30.6	

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

EIRP EVDO REV. A. 850 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS INC
Project #: 11U14141
Date: 12/19/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE COVER
Mode: TX, CELL BAND CDMA2000 EVDO REV A MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 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
Low Ch, 824.70MHz									
1.649	-17.5	V	3.0	35.5	1.0	-52.0	-13.0	-39.0	
2.474	-19.6	V	3.0	35.4	1.0	-54.0	-13.0	-41.0	
1.649	-17.2	H	3.0	35.5	1.0	-51.8	-13.0	-38.8	
2.474	-16.5	H	3.0	35.4	1.0	-50.9	-13.0	-37.9	
Mid Ch, 836.52MHz									
1.673	-19.8	V	3.0	35.5	1.0	-54.3	-13.0	-41.3	
2.510	-17.6	V	3.0	35.4	1.0	-52.1	-13.0	-39.1	
1.673	-18.9	H	3.0	35.5	1.0	-53.5	-13.0	-40.5	
2.510	-21.3	H	3.0	35.4	1.0	-55.7	-13.0	-42.7	
High Ch, 848.31MHz									
1.697	-22.2	V	3.0	35.5	1.0	-56.7	-13.0	-43.7	
2.545	-19.0	V	3.0	35.4	1.0	-53.5	-13.0	-40.5	
1.697	-18.4	H	3.0	35.5	1.0	-52.9	-13.0	-39.9	
2.545	-19.1	H	3.0	35.4	1.0	-53.5	-13.0	-40.5	

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

EIRP EVDO REV. A 1900 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company:	LG ELECTRONICS
Project #:	11U14141
Date:	12/20/11
Test Engineer:	MENGISTU MEKURIA
Configuration:	EUT WITH INDUCTIVE COVER
Mode:	TX, PCS BAND CDMA2000 EVDO REV A MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 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
Low Ch, 1851.25MHz									
3.703	-1.7	V	3.0	35.4	1.0	-36.1	-13.0	-23.1	
5.554	-1.6	V	3.0	35.4	1.0	-36.0	-13.0	-23.0	
7.405	5.5	V	3.0	35.7	1.0	-29.3	-13.0	-16.3	
9.256	1.2	V	3.0	35.6	1.0	-33.3	-13.0	-20.3	
11.108	4.1	V	3.0	34.8	1.0	-29.7	-13.0	-16.7	
12.959	3.2	V	3.0	34.0	1.0	-29.8	-13.0	-16.8	
14.810	7.4	H	3.0	33.6	1.0	-25.2	-13.0	-12.2	
3.703	2.0	V	3.0	35.4	1.0	-32.3	-13.0	-19.3	
5.554	-5.7	V	3.0	35.4	1.0	-40.1	-13.0	-27.1	
7.405	-1.8	V	3.0	35.7	1.0	-36.5	-13.0	-23.5	
9.256	-3.2	V	3.0	35.6	1.0	-37.8	-13.0	-24.8	
11.108	-2.4	V	3.0	34.8	1.0	-36.2	-13.0	-23.2	
12.959	-2.8	H	3.0	34.0	1.0	-35.8	-13.0	-22.8	
14.810	3.1	H	3.0	33.6	1.0	-29.5	-13.0	-16.5	
Mid Ch, 1880.00MHz									
3.760	3.8	H	3.0	35.3	1.0	-30.5	-13.0	-17.5	
5.640	-2.5	H	3.0	35.4	1.0	-36.9	-13.0	-23.9	
7.520	4.2	H	3.0	35.7	1.0	-30.5	-13.0	-17.5	
9.400	-2.8	H	3.0	35.6	1.0	-37.4	-13.0	-24.4	
11.280	-2.4	H	3.0	34.7	1.0	-36.1	-13.0	-23.1	
13.160	-3.6	H	3.0	34.0	1.0	-36.6	-13.0	-23.6	
15.040	6.0	H	3.0	33.5	1.0	-26.5	-13.0	-13.5	
3.760	11.4	H	3.0	35.3	1.0	-23.0	-13.0	-10.0	
5.640	-9.3	H	3.0	35.4	1.0	-43.7	-13.0	-30.7	
7.520	-4.6	H	3.0	35.7	1.0	-39.3	-13.0	-26.3	
9.400	-9.1	H	3.0	35.6	1.0	-43.7	-13.0	-30.7	
11.280	-1.1	H	3.0	34.7	1.0	-34.8	-13.0	-21.8	
13.160	-6.0	H	3.0	34.0	1.0	-39.0	-13.0	-26.0	
15.040	2.2	H	3.0	33.5	1.0	-30.3	-13.0	-17.3	
High Ch, 1908.75MHz									
3.818	2.8	V	3.0	35.3	1.0	-31.5	-13.0	-18.5	
5.726	-5.7	V	3.0	35.4	1.0	-40.2	-13.0	-27.2	
7.635	-3.8	V	3.0	35.7	1.0	-38.5	-13.0	-25.5	
9.544	-6.2	V	3.0	35.6	1.0	-40.8	-13.0	-27.8	
11.453	-2.8	V	3.0	34.6	1.0	-36.3	-13.0	-23.3	
13.361	-5.4	V	3.0	33.9	1.0	-38.3	-13.0	-25.3	
15.270	7.5	V	3.0	33.4	1.0	-24.9	-13.0	-11.9	
3.818	6.6	H	3.0	35.3	1.0	-27.7	-13.0	-14.7	
5.726	-8.4	H	3.0	35.4	1.0	-42.8	-13.0	-29.8	
7.635	-7.9	H	3.0	35.7	1.0	-42.6	-13.0	-29.6	
9.544	-6.1	H	3.0	35.6	1.0	-40.6	-13.0	-27.6	
11.453	-4.4	H	3.0	34.6	1.0	-38.0	-13.0	-25.0	
13.361	-11.7	H	3.0	33.9	1.0	-44.6	-13.0	-31.6	
15.270	-0.3	H	3.0	33.4	1.0	-32.7	-13.0	-19.7	

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

INDUCTIVE CHARGER WITH INDUCTIVE COVER

ERP 1xRTT 850 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company:	LG ELECTRONICS
Project #:	11U14141
Date:	12/20/11
Test Engineer:	MENGISTU MEKURIA
Configuration:	EUT WITH INDUCTIVE CHARGER
Mode:	TX, CELL BAND CDMA 1xRTT MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 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
Low Ch, 824.70MHz									
1.649	-7.6	V	3.0	35.5	1.0	-42.1	-13.0	-29.1	
2.474	-13.2	V	3.0	35.4	1.0	-47.6	-13.0	-34.6	
3.299	-20.6	V	3.0	35.5	1.0	-55.1	-13.0	-42.1	
1.649	-7.1	H	3.0	35.5	1.0	-41.7	-13.0	-28.7	
2.474	-8.0	H	3.0	35.4	1.0	-42.4	-13.0	-29.4	
3.299	-22.0	H	3.0	35.5	1.0	-56.6	-13.0	-43.6	
Mid Ch, 836.52MHz									
1.673	-7.8	V	3.0	35.5	1.0	-42.3	-13.0	-29.3	
2.510	-13.5	V	3.0	35.4	1.0	-47.9	-13.0	-34.9	
3.346	-20.1	V	3.0	35.5	1.0	-54.6	-13.0	-41.6	
1.673	-6.7	H	3.0	35.5	1.0	-41.2	-13.0	-28.2	
2.510	-10.7	H	3.0	35.4	1.0	-45.1	-13.0	-32.1	
3.346	-20.7	H	3.0	35.5	1.0	-55.2	-13.0	-42.2	
High Ch, 848.31MHz									
1.697	-12.2	V	3.0	35.5	1.0	-46.7	-13.0	-33.7	
2.545	-15.5	V	3.0	35.4	1.0	-49.9	-13.0	-36.9	
3.393	-22.9	V	3.0	35.5	1.0	-57.4	-13.0	-44.4	
1.697	-16.9	H	3.0	35.5	1.0	-51.4	-13.0	-38.4	
2.545	-14.2	H	3.0	35.4	1.0	-48.6	-13.0	-35.6	
3.393	-24.0	H	3.0	35.5	1.0	-58.5	-13.0	-45.5	

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

EIRP 1xRTT 1900 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 11U14141
Date: 12/20/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE CHARGER
Mode: TX, PCS BAND CDMA 1xRTT MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 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
Low Ch, 1851.25MHz									
3.703	-5.8	V	3.0	35.4	1.0	-40.1	-13.0	-27.1	
5.554	-11.3	V	3.0	35.4	1.0	-45.7	-13.0	-32.7	
7.405	-2.9	V	3.0	35.7	1.0	-37.7	-13.0	-24.7	
9.256	-3.1	V	3.0	35.6	1.0	-37.6	-13.0	-24.6	
3.703	-7.2	H	3.0	35.4	1.0	-41.5	-13.0	-28.5	
5.554	-28.7	H	3.0	35.4	1.0	-63.1	-13.0	-50.1	
7.405	-13.3	H	3.0	35.7	1.0	-48.0	-13.0	-35.0	
9.256	-6.6	H	3.0	35.6	1.0	-41.1	-13.0	-28.1	
Mid Ch, 1880.00MHz									
3.760	-0.4	V	3.0	35.3	1.0	-34.7	-13.0	-21.7	
5.640	-11.3	V	3.0	35.4	1.0	-45.7	-13.0	-32.7	
7.520	-5.0	V	3.0	35.7	1.0	-39.7	-13.0	-26.7	
9.400		V	3.0	35.6	1.0	-34.6	-13.0	-21.6	
3.760	-2.7	H	3.0	35.3	1.0	-37.0	-13.0	-24.0	
5.640	-9.3	H	3.0	35.4	1.0	-43.8	-13.0	-30.8	
7.520	-9.7	H	3.0	35.7	1.0	-44.4	-13.0	-31.4	
9.400	-7.1	H	3.0	35.6	1.0	-41.7	-13.0	-28.7	
High Ch, 1908.75MHz									
3.818	3.3	V	3.0	35.3	1.0	-31.0	-13.0	-18.0	
5.726	-8.7	V	3.0	35.4	1.0	-43.2	-13.0	-30.2	
7.635	-6.1	V	3.0	35.7	1.0	-40.8	-13.0	-27.8	
9.544	-1.4	V	3.0	35.6	1.0	-36.0	-13.0	-23.0	
3.818	6.0	H	3.0	35.3	1.0	-28.3	-13.0	-15.3	
5.726	-27.3	H	3.0	35.4	1.0	-61.7	-13.0	-48.7	
7.635	-13.2	H	3.0	35.7	1.0	-47.9	-13.0	-34.9	
9.544	-2.5	H	3.0	35.6	1.0	-37.0	-13.0	-24.0	

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

EIRP EVDO REV. A. 850 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 11U14141
Date: 12/20/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE CHARGER
Mode: TX, CELL BAND CDMA2000 EVDO REV A MODE

Chamber	Pre-amplifer	Filter	Limit
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
Low Ch, 824.70MHz									
1.649	5.6	V	3.0	38.2	1.0	-31.5	-13.0	-18.5	
2.474	-18.0	V	3.0	37.5	1.0	-54.5	-13.0	-41.5	
3.299	-14.7	V	3.0	37.1	1.0	-50.8	-13.0	-37.8	
1.649	11.9	H	3.0	38.2	1.0	-25.3	-13.0	-12.3	
2.474	-16.5	H	3.0	37.5	1.0	-53.0	-13.0	-40.0	
3.299	-16.3	H	3.0	37.1	1.0	-52.4	-13.0	-39.4	
Mid Ch, 836.52MHz									
1.673	5.3	V	3.0	38.1	1.0	-31.8	-13.0	-18.8	
2.510	-18.4	V	3.0	37.5	1.0	-54.8	-13.0	-41.8	
3.346	-14.2	V	3.0	37.1	1.0	-50.3	-13.0	-37.3	
1.673	12.3	H	3.0	38.1	1.0	-24.8	-13.0	-11.8	
2.510	-19.2	H	3.0	37.5	1.0	-55.7	-13.0	-42.7	
3.346	-15.0	H	3.0	37.1	1.0	-51.1	-13.0	-38.1	
High Ch, 848.31MHz									
1.697	0.9	V	3.0	38.1	1.0	-36.2	-13.0	-23.2	
2.545	-20.3	V	3.0	37.5	1.0	-56.8	-13.0	-43.8	
3.393	-17.0	V	3.0	37.1	1.0	-53.0	-13.0	-40.0	
1.697	2.1	H	3.0	38.1	1.0	-35.0	-13.0	-22.0	
2.545	-22.7	H	3.0	37.5	1.0	-59.2	-13.0	-46.2	
3.393	-18.3	H	3.0	37.1	1.0	-54.4	-13.0	-41.4	

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

EIRP EVDO REV. A 1900 BAND

Compliance Certification Services
Above 1GHz High Frequency Substitution Measurement

Company: LG ELECTRONICS
Project #: 11U14141
Date: 12/20/11
Test Engineer: MENGISTU MEKURIA
Configuration: EUT WITH INDUCTIVE CHARGER
Mode: TX, PCS BAND CDMA2000 EVDO REV A MODE

Chamber	Pre-amplifer	Filter	Limit
5m Chamber B	T145 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
Low Ch, 1851.25MHz									
3.703	-10.1	V	3.0	35.4	1.0	-44.4	-13.0	-31.4	
5.554	-12.8	V	3.0	35.4	1.0	-47.2	-13.0	-34.2	
7.405	-8.3	V	3.0	35.7	1.0	-43.0	-13.0	-30.0	
9.256	-10.5	V	3.0	35.6	1.0	-45.1	-13.0	-32.1	
11.108	-11.4	V	3.0	34.8	1.0	-45.2	-13.0	-32.2	
12.959	-6.4	V	3.0	34.0	1.0	-39.4	-13.0	-26.4	
14.810	-4.1	V	3.0	33.6	1.0	-36.7	-13.0	-23.7	
3.703	-13.9	H	3.0	35.4	1.0	-48.2	-13.0	-35.2	
5.554	-13.6	H	3.0	35.4	1.0	-48.0	-13.0	-35.0	
7.405	-11.4	H	3.0	35.7	1.0	-46.1	-13.0	-33.1	
9.256	-12.4	H	3.0	35.6	1.0	-47.0	-13.0	-34.0	
11.108	-10.0	H	3.0	34.8	1.0	-43.8	-13.0	-30.8	
12.959	-10.6	H	3.0	34.0	1.0	-43.6	-13.0	-30.6	
14.810	-6.7	H	3.0	33.6	1.0	-39.3	-13.0	-26.3	
Mid Ch, 1880.00MHz									
3.760	-4.7	V	3.0	35.3	1.0	-39.0	-13.0	-26.0	
5.640	-12.7	V	3.0	35.4	1.0	-47.2	-13.0	-34.2	
7.520	-10.3	V	3.0	35.7	1.0	-45.0	-13.0	-32.0	
9.400	-10.7	V	3.0	35.6	1.0	-45.2	-13.0	-32.2	
11.280	-11.8	V	3.0	34.7	1.0	-45.5	-13.0	-32.5	
13.160	-13.6	V	3.0	34.0	1.0	-46.6	-13.0	-33.6	
15.040	0.8	V	3.0	33.5	1.0	-31.7	-13.0	-18.7	
3.760	0.3	H	3.0	35.3	1.0	-34.0	-13.0	-21.0	
5.640	-13.8	H	3.0	35.4	1.0	-48.2	-13.0	-35.2	
7.520	-15.8	H	3.0	35.7	1.0	-50.5	-13.0	-37.5	
9.400	-14.0	H	3.0	35.6	1.0	-48.6	-13.0	-35.6	
11.280	-13.6	H	3.0	34.7	1.0	-47.3	-13.0	-34.3	
13.160	-15.1	H	3.0	34.0	1.0	-48.1	-13.0	-35.1	
15.040	-8.0	H	3.0	33.5	1.0	-40.5	-13.0	-27.5	
High Ch, 1908.75MHz									
3.818	-1.0	V	3.0	35.3	1.0	-35.3	-13.0	-22.3	
5.726	-10.2	V	3.0	35.4	1.0	-44.7	-13.0	-31.7	
7.635	-11.4	V	3.0	35.7	1.0	-46.1	-13.0	-33.1	
9.544	-8.9	V	3.0	35.6	1.0	-43.4	-13.0	-30.4	
11.453	-7.6	V	3.0	34.6	1.0	-41.1	-13.0	-28.1	
13.361	-8.5	V	3.0	33.9	1.0	-41.5	-13.0	-28.5	
15.270	3.4	V	3.0	33.4	1.0	-29.1	-13.0	-16.1	
3.818	-5.1	H	3.0	35.3	1.0	-39.4	-13.0	-26.4	
5.726	-13.0	H	3.0	35.4	1.0	-47.4	-13.0	-34.4	
7.635	-14.4	H	3.0	35.7	1.0	-49.1	-13.0	-36.1	
9.544	-9.0	H	3.0	35.6	1.0	-43.6	-13.0	-30.6	
11.453	-10.6	H	3.0	34.6	1.0	-44.2	-13.0	-31.2	
13.361	-14.8	H	3.0	33.9	1.0	-47.8	-13.0	-34.8	
15.270	-4.0	H	3.0	33.4	1.0	-36.4	-13.0	-23.4	

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