Lab Code: 200707-0

FCC PART 22H, 24E

MEASUREMENT AND TEST REPORT

For

ShenZhen EVOL Technology Development Co., Ltd

No. 8 Shop D, Block C Shan Shui Ju, Long Wei Road, Futian District,
Shenzhen, Guangdong, China

FCC ID: A7V20102201

Report Type:	**Product Type:**
Original Report	Dual Band Wireless Cell Phone Signal Amplifier

Test Engineer:	Henry Ding
Report Number:	RSZ111209001-00
Report Date:	2012-03-02
Reviewed By:	Alvin Huang EMC Engineer
Test Laboratory:	Bay Area Compliance Laboratories Corp. (Shenzhen) 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China Tel: +86-755-33320018 Fax: +86-755-33320008 www.baclcorp.com.cn

TABLE OF CONTENTS

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *ShenZhen EVOL Technology Development Co., Ltd*'s product, model number: *20102201 (FCC ID: A7V20102201)* (or the "EUT") in this report is a *Dual Band Wireless Cell Phone Signal Amplifier* , which was measures approximately: 14.0 cm (L) x 12.2 cm (W) x 2.2 cm (H), rated input voltage: DC 5 V from adapter.

Adapter Information: AC/DC ADAPTER
Model: WDA-0503004
Input: 100-240VAC 50/60Hz Max 0.5A
Output: 5.0V DC 3A

** All measurement and test data in this report was gathered from production sample serial number: 1112012 (Assigned by BACL, Shenzhen). The EUT was received on 2011-12-09.*

Objective

This report is prepared on behalf of *ShenZhen EVOL Technology Development Co., Ltd* in accordance with Part 2-Subpart J, Part 22 Subpart H, and Part 24 Subpart E of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC rules for output power, modulation characteristic, occupied bandwidth, spurious emission at antenna terminal, spurious radiated emission, and band edge.

Related Submittal(s)/Grant(s)

No related submittal(s)

Test Methodology

All tests and measurements indicated in this document were performed in accordance with the Code of Federal Regulations Title 47 Part 2, Sub-part J as well as the following parts:

Part 22 Subpart H - Public Mobile Services
Part 24 Subpart E - Personal Communication Services

Applicable Standards: TIA/EIA 603-C, ANSI C63.4-2009.

All radiated and conducted emissions measurements were performed at Bay Area Compliance Laboratories Corp. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

The uncertainty of any RF tests which use conducted method measurement is 0.96 dB, the uncertainty of any radiation on emissions measurement is 4.0 dB

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp.(Shenzhen) to collect test data is located on the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on December 06, 2010. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2009.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is an ISO/IEC 17025 accredited laboratory, and is accredited by National Voluntary Laboratory Accredited Program (Lab Code 200707-0).

The current scope of accreditations can be found at http://ts.nist.gov/Standards/scopes/2007070.htm

SYSTEM TEST CONFIGURATION

Justification

The EUT was configured for testing according to TIA/EIA-603-C.

The final qualification test was performed with the EUT operating at normal mode.

Equipment Modifications

No modification was made to the EUT.

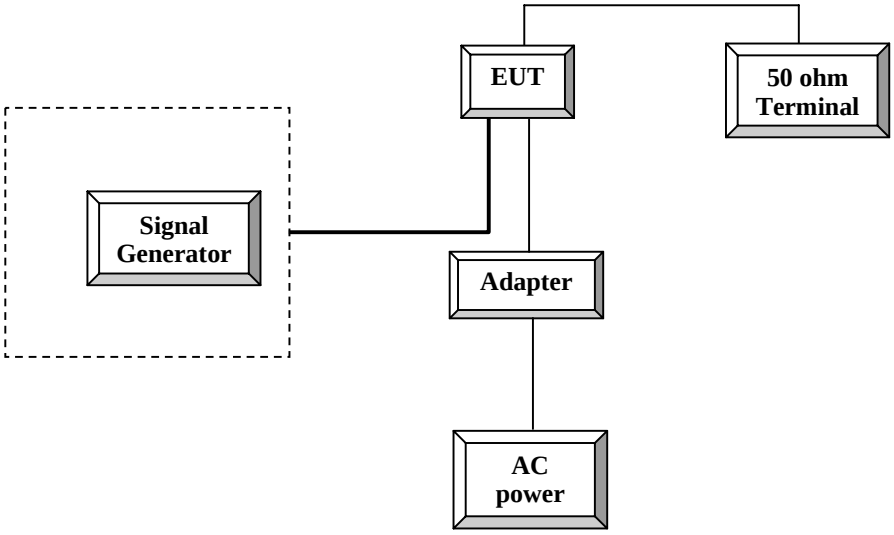
Support Equipment List and Details

Manufacturer	Description	Model	Serial Number
R&S	Universal Radio Communication Tester (Signal Generator)	CMU200	109038

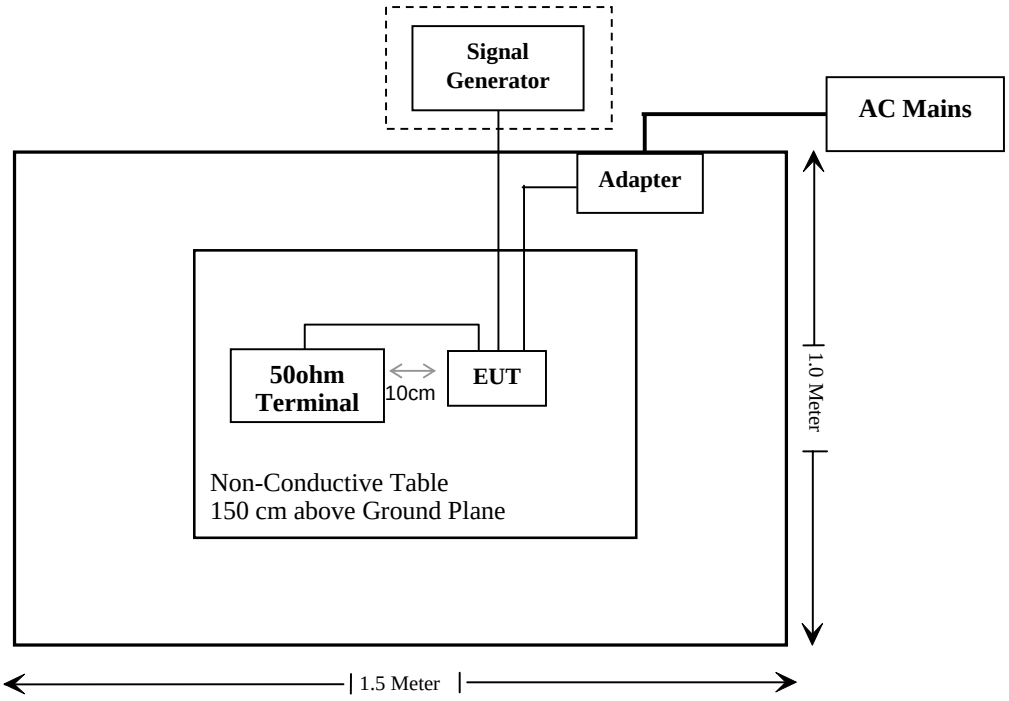
External I/O Cable

Cable Description	Length (m)	From Port	To
Unshielded Detachable Power Cable	1.70	AC power	Adapter
Unshielded Detachable Power Cable	1.30	Adapter	EUT
Coaxial Cable	1.20	Signal Generator	EUT
Coaxial Cable	1.20	RF Terminal	EUT

Configuration of Test Setup



Block Diagram of Test Setup



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b)(1), §2.1091	Maximum Permissible Exposure (MPE)	Compliance
§2.1046; § 22.913 (a); § 24.232 (a)	RF Output Power	Compliance
§ 2.1047	Modulation Characteristics	Not Applicable
§ 2.1049; § 22.905 § 22.917; § 24.238	Occupied Bandwidth	Compliance
§ 2.1051, § 22.917 (a); § 24.238 (a)	Spurious Emissions at Antenna Terminal	Compliance
§ 2.1053, § 22.917 (a); § 24.238 (a)	Field Strength of Spurious Radiation	Compliance
§ 22.917 (a); § 24.238 (a)	Out of band emission, Band Edge	Compliance
§ 2.1055, § 22.355; § 24.235	Frequency stability vs. temperature Frequency stability vs. voltage	Not Applicable *

N/A*: The device is an amplifier.

FCC §1.1307 & §2.1091- MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart FCC §1.1307 (b)(1) and §2.1091 systems operating under the provisions of t his section shall be operated in a manner that ensures the public is not exposed to RF energy level in excess of the communication guidelines.

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (V/m)**	**Magnetic Field Strength (A/m)**	**Power Density (mw/cm^2)**	**Averaging Time (Minutes)**
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*($180/f^2$)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz
* = Plane-wave equivalent power density

Test Data

Predication of MPE limit at a given distance

$$S = PG/4\pi R^2$$

Where:

S = power density (in appropriate units, e.g. mW/cm^2)
P = power input to the antenna (in appropriate units, e.g., mW).
G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally ***numeric*** gain.
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

GSM

Mode	Frequency (MHz)	Antenna Gain		Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
Cellular Band								
Uplink	836.6	14	25.12	19.25	84.140	20	0.421	0.549
Downlink	881.6	8	6.31	11.18	13.122	20	0.016	0.579
PCS Band								
Uplink	1909.8	14	25.12	19.62	91.622	20	0.458	1.000
Downlink	1960.0	8	6.31	11.17	13.092	20	0.016	1.000

EDGE

Mode	Frequency (MHz)	Antenna Gain		Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
Cellular Band								
Uplink	824.2	14	25.12	19.39	86.896	20	0.434	0.549
Downlink	893.8	8	6.31	11.32	13.552	20	0.017	0.588
PCS Band								
Uplink	1880.0	14	25.12	19.54	89.950	20	0.450	1.000
Downlink	1989.8	8	6.31	11.26	13.366	20	0.017	1.000

CDMA

Mode	Frequency (MHz)	Antenna Gain		Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
Cellular Band								
Uplink	848.31	14	25.12	20.26	106.170	20	0.531	0.550
Downlink	869.70	8	6.31	11.28	13.428	20	0.017	0.588
PCS Band								
Uplink	1908.75	14	25.12	20.21	104.954	20	0.525	1.000
Downlink	1988.75	8	6.31	10.18	10.423	20	0.013	1.000

WCDMA

Mode	Frequency (MHz)	Antenna Gain		Conducted Power		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
		(dBi)	(numeric)	(dBm)	(mW)			
Cellular Band								
Uplink	826.4	14	25.12	19.47	88.512	20	0.443	0.551
Downlink	891.6	8	6.31	11.57	14.355	20	0.018	0.588
PCS Band								
Uplink	1880.0	14	25.12	19.43	87.700	20	0.439	1.000
Downlink	1987.6	8	6.31	10.49	11.194	20	0.014	1.000

Result: The device meets FCC MPE limit at 20 cm distance.

FCC §2.1047 - MODULATION CHARACTERISTIC

According to FCC § 2.1047(d), Part 22H and 24E, there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

FCC § 2.1046, § 22.913(a), § 24.232(c) - RF OUTPUT POWER

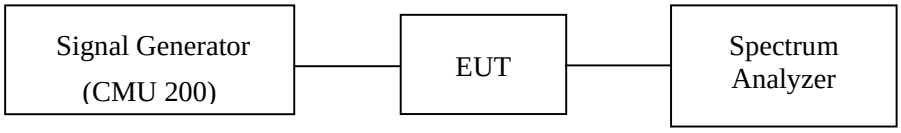
Applicable Standard

According to FCC §2.1046, §22.913 (a) and §24.232 (a)

Test Procedure

Conducted method:

The RF output of the transmitter was connected to the wireless test set and the spectrum analyzer through sufficient attenuation.



Radiated method:

TIA 603-C section 2.2.17

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100224	2011-11-11	2012-11-10

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0kPa

The testing was performed by Henry Ding on 2012-02-29.

Conducted Power

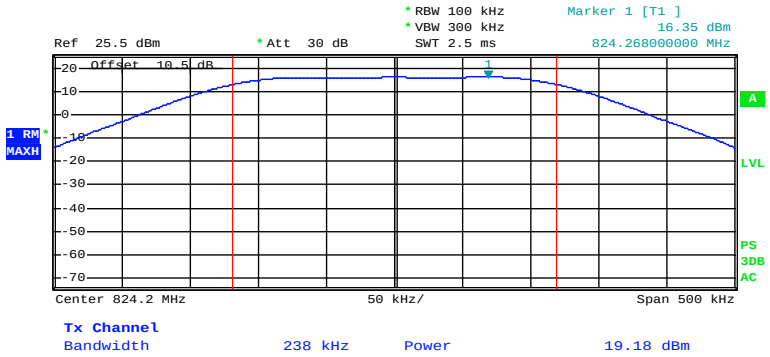
GSM

Mode	Channel	Frequency (MHz)	Output Power (dBm)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	Low	824.2	19.18
	Middle	836.6	19.25
	High	848.8	19.16
Downlink (869-894 MHz)	Low	869.2	11.04
	Middle	881.6	11.18
	High	893.8	11.10
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	Low	1850.2	19.40
	Middle	1880.0	19.55
	High	1909.8	19.62
Downlink (1930-1990 MHz)	Low	1930.2	11.12
	Middle	1960.0	11.17
	High	1989.8	11.04

Please see the below plots.

Cellular Band

Uplink, Low Channel



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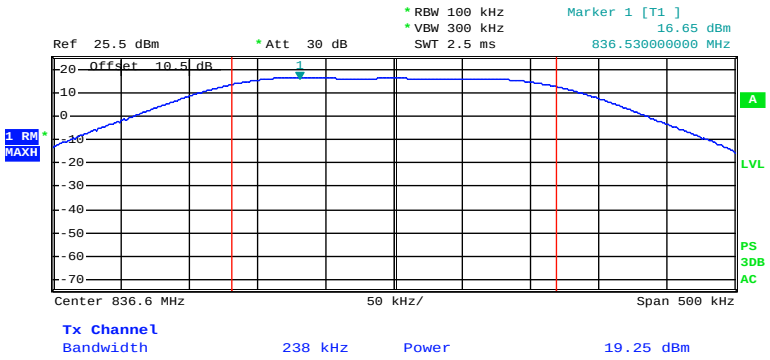
Uplink, Middle Channel



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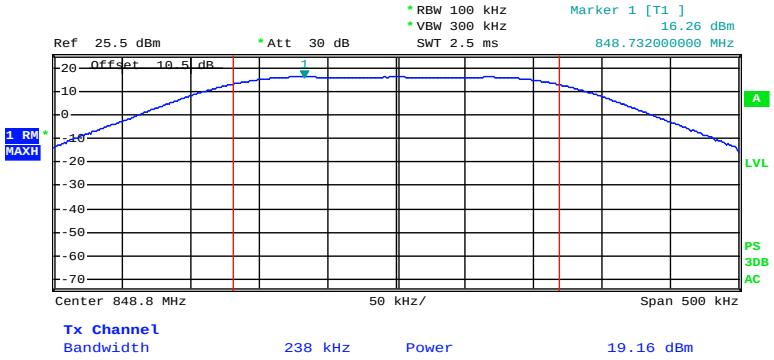
Uplink, High Channel



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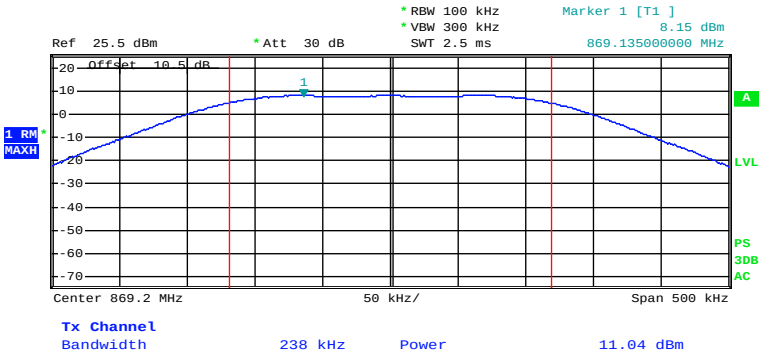
Downlink, Low Channel



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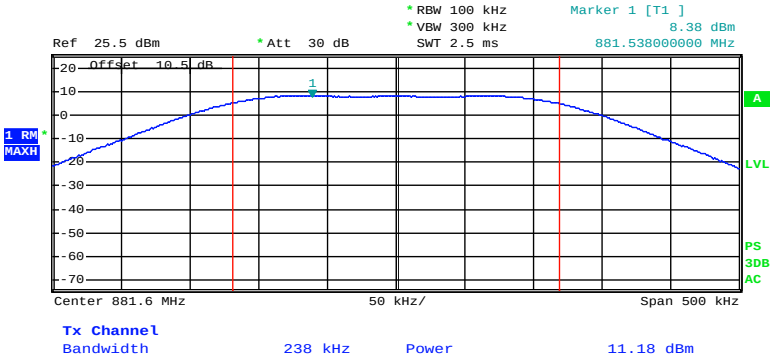
Downlink, Middle Channel



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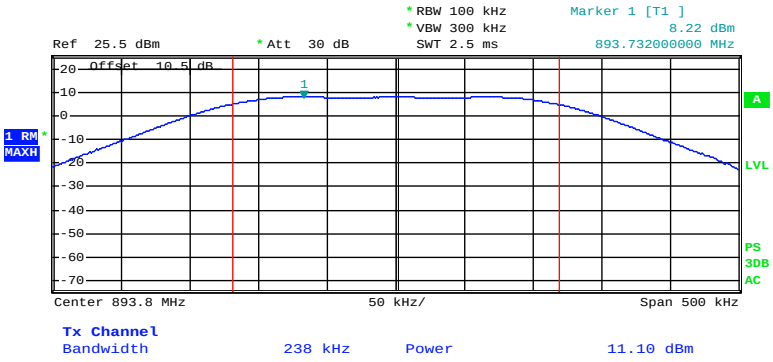
Downlink, High Channel



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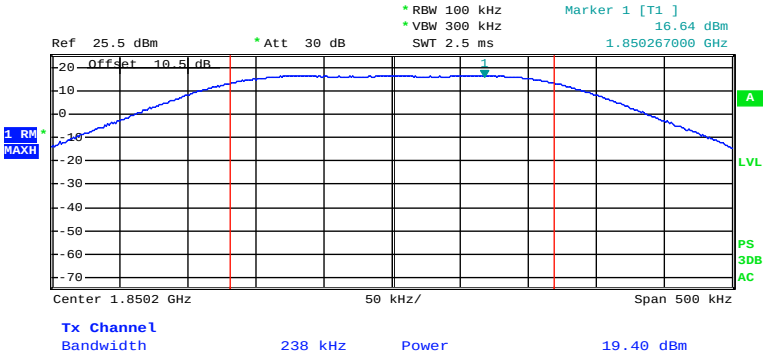
PCS Band

Uplink, Low Channel



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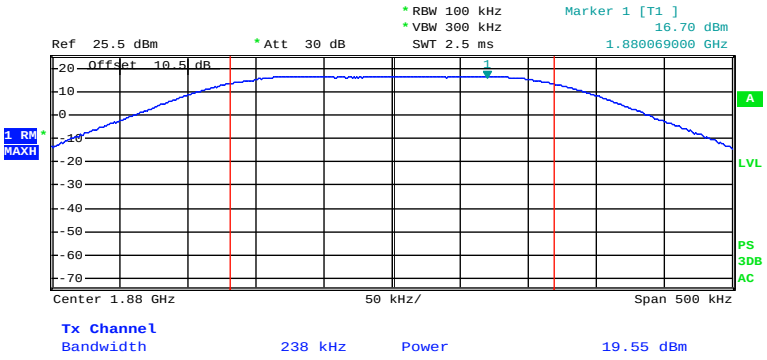
Uplink, Middle Channel



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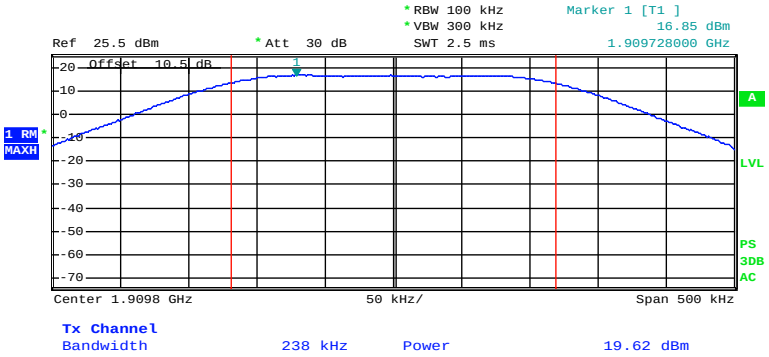
Uplink, High Channel



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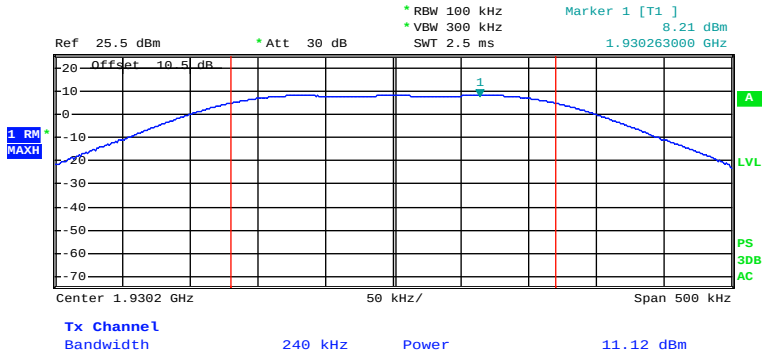
Downlink, Low Channel



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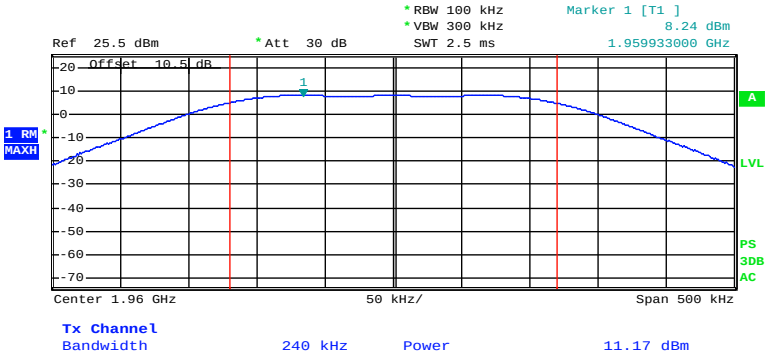

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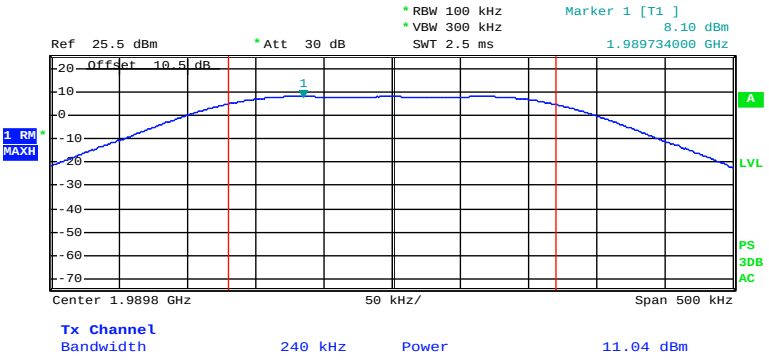
Downlink, High Channel



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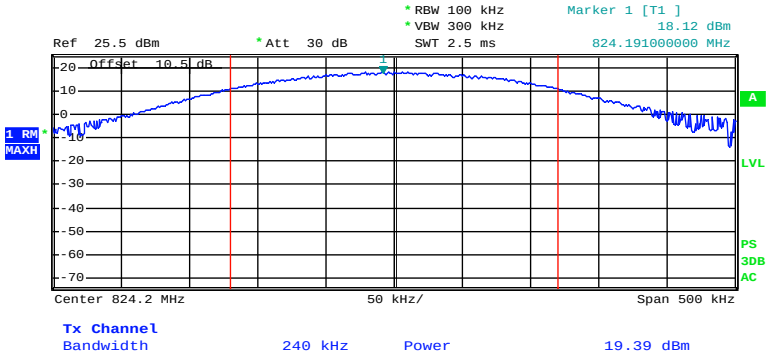
EDGE:

Mode	Channel	Frequency (MHz)	Output Power (dBm)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	Low	824.2	19.39
	Middle	836.6	19.21
	High	848.8	19.34
Downlink (869-894 MHz)	Low	869.2	11.12
	Middle	881.6	11.14
	High	893.8	11.32
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	Low	1850.2	19.26
	Middle	1880.0	19.54
	High	1909.8	19.12
Downlink (1930-1990 MHz)	Low	1930.2	11.22
	Middle	1960.0	11.07
	High	1989.8	11.26

Please see the below plots.

Cellular Band

Uplink, Low Channel



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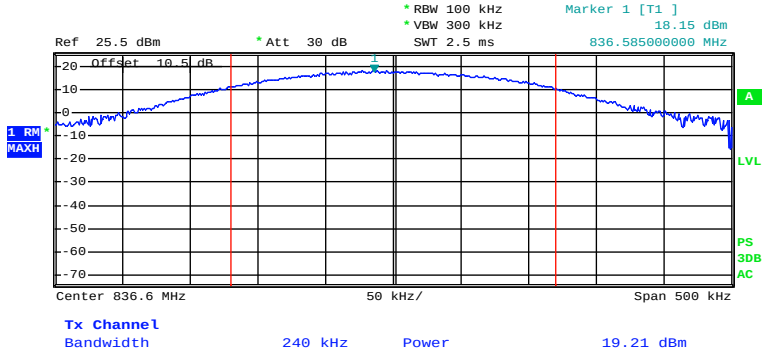
Uplink, Middle Channel



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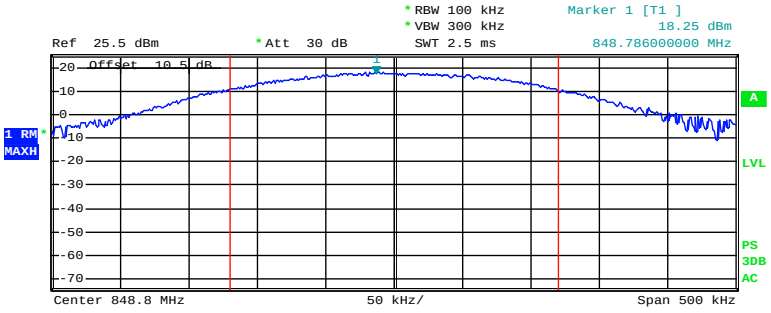
Uplink, High Channel



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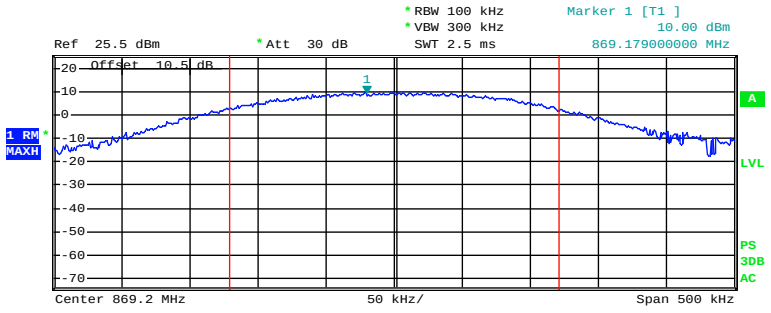
Downlink, Low Channel



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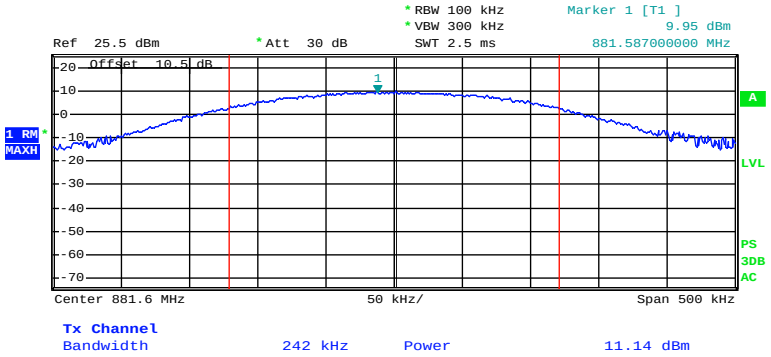

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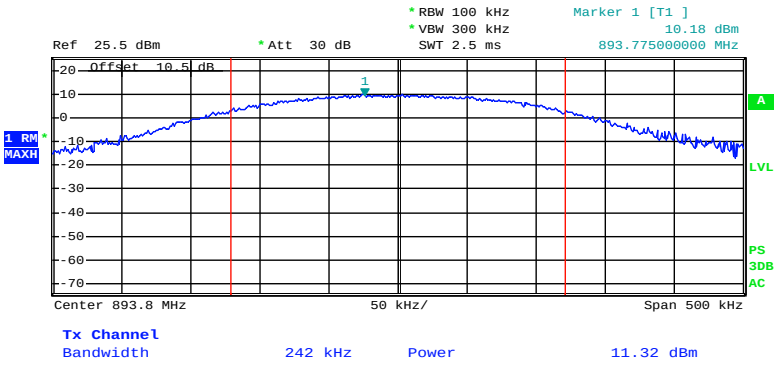
Downlink, High Channel



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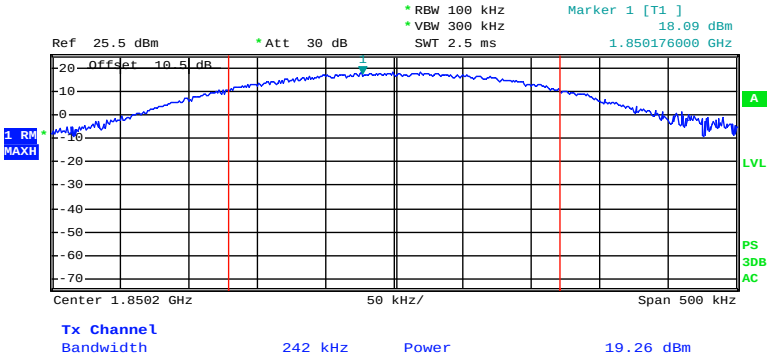
PCS Band

Uplink, Low Channel



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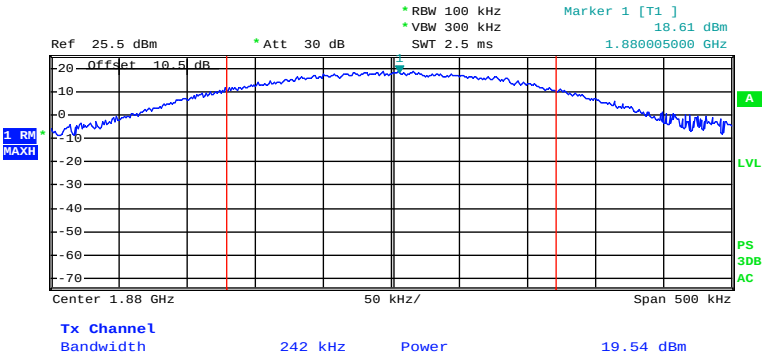
Uplink, Middle Channel



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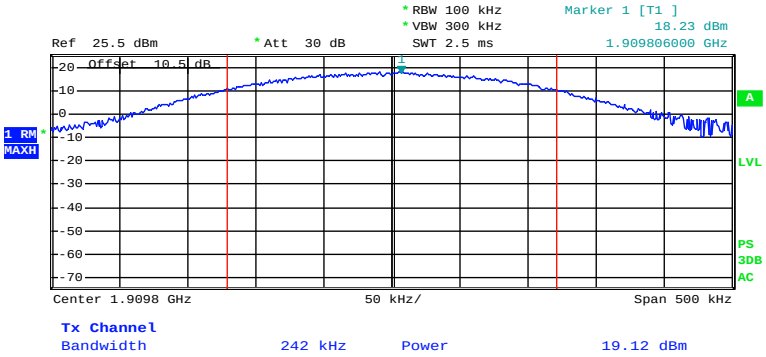
Uplink, High Channel



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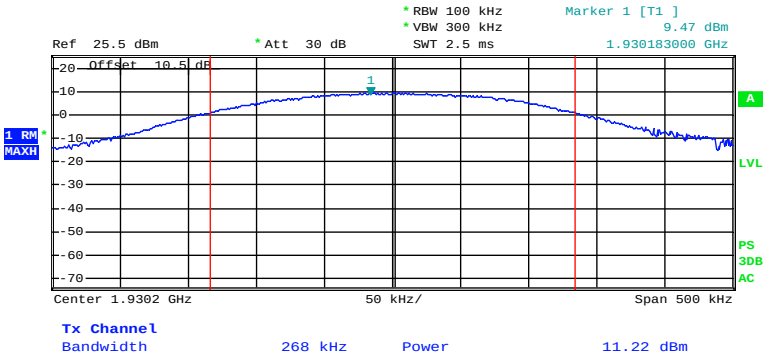
Downlink, Low Channel



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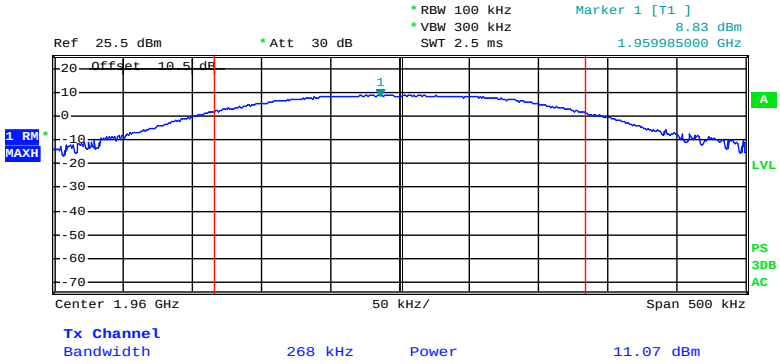

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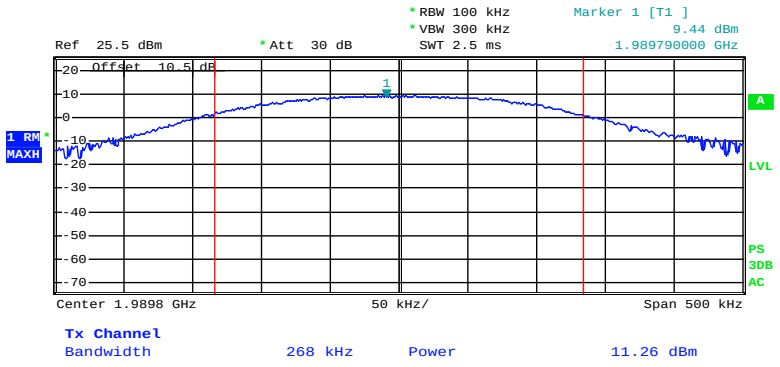
Downlink, High Channel



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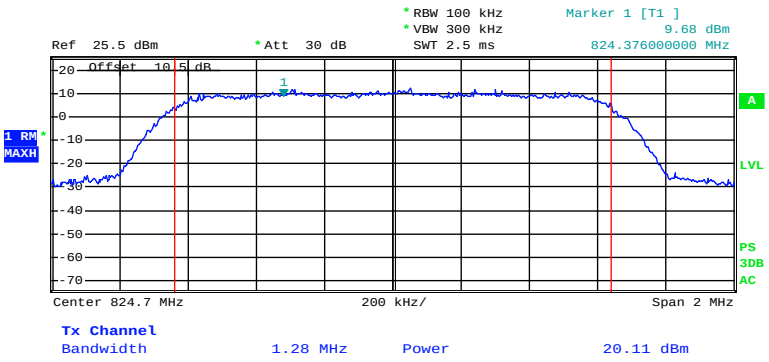
CDMA:

Mode	Channel	Frequency (MHz)	Output Power (dBm)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	Low	824.70	20.11
	Middle	836.52	20.19
	High	848.31	20.26
Downlink (869-894 MHz)	Low	869.70	11.28
	Middle	881.52	11.22
	High	893.31	11.17
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	Low	1851.25	20.15
	Middle	1880.00	20.12
	High	1908.75	20.21
Downlink (1930-1990 MHz)	Low	1931.25	10.07
	Middle	1960.00	10.15
	High	1988.75	10.18

Please see the below plots.

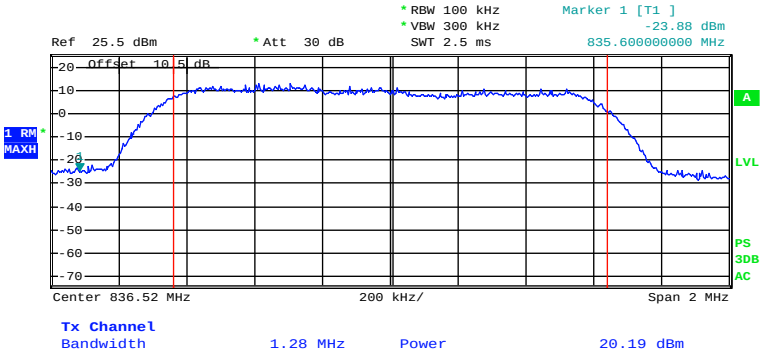
Cellular Band

Uplink, Low Channel



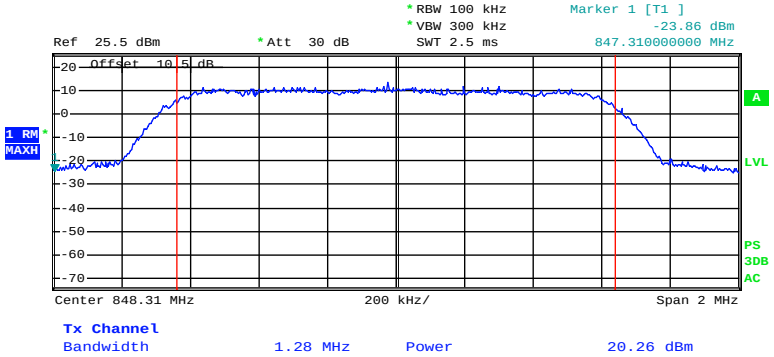
Date: 29.FEB.2012 09:56:28

Uplink, Middle Channel



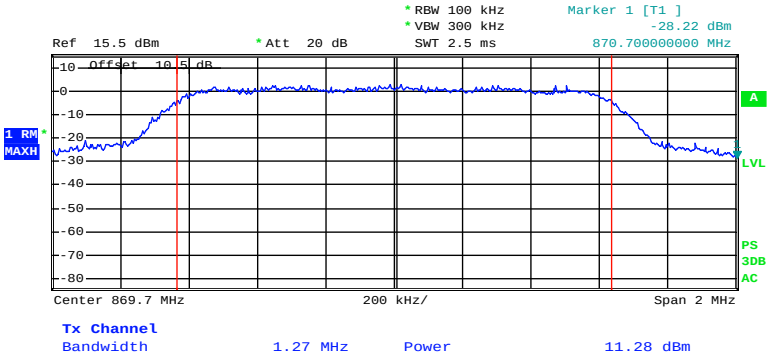
Date: 29.FEB.2012 09:57:03

Uplink, High Channel



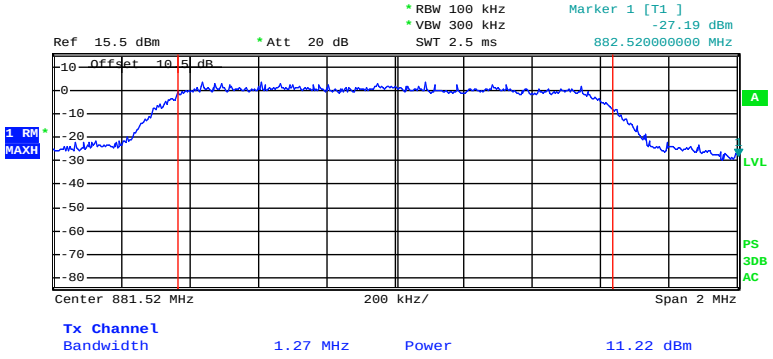
Date: 29.FEB.2012 09:57:39

Downlink, Low Channel



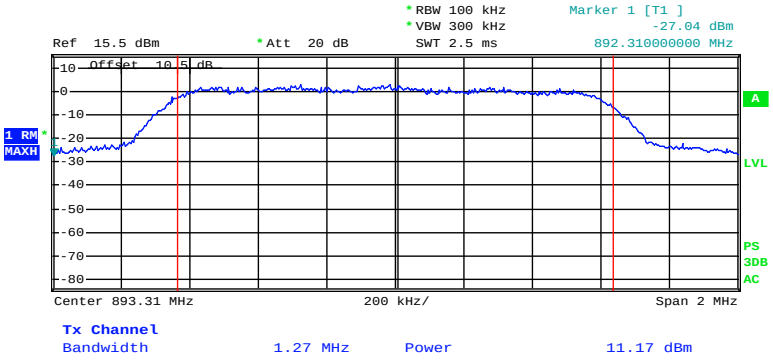
Date: 29.FEB.2012 10:03:48

Downlink, Middle Channel



Date: 29.FEB.2012 10:03:11

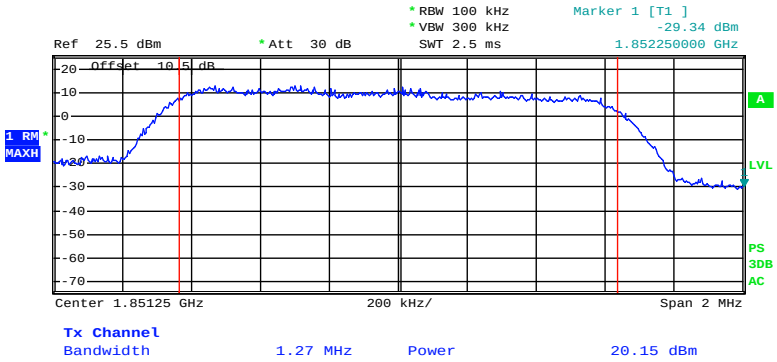
Downlink, High Channel



Date: 29.FEB.2012 10:02:37

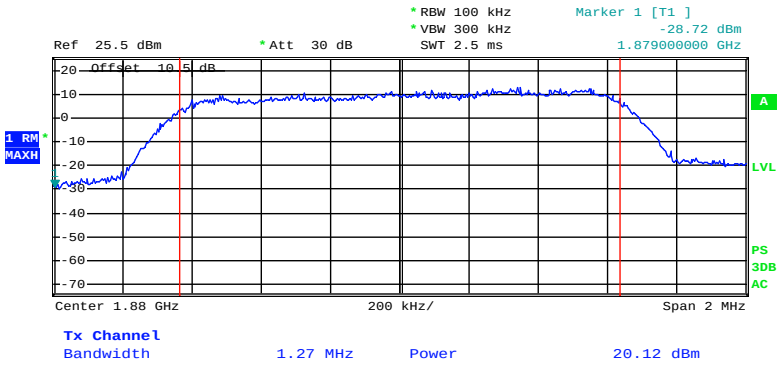
PCS Band

Uplink, Low Channel



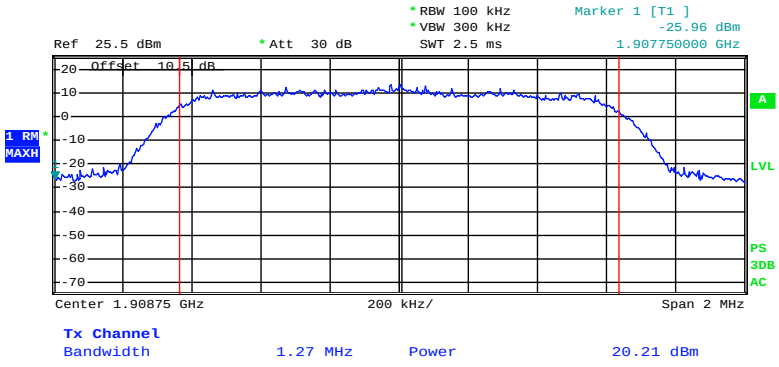
Date: 29.FEB.2012 09:52:11

Uplink, Middle Channel



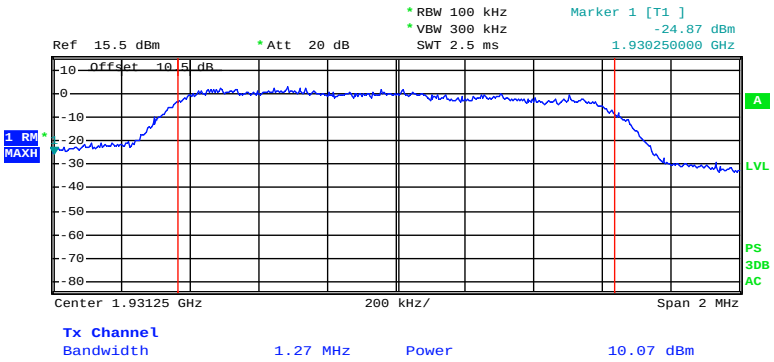
Date: 29.FEB.2012 09:52:41

Uplink, High Channel



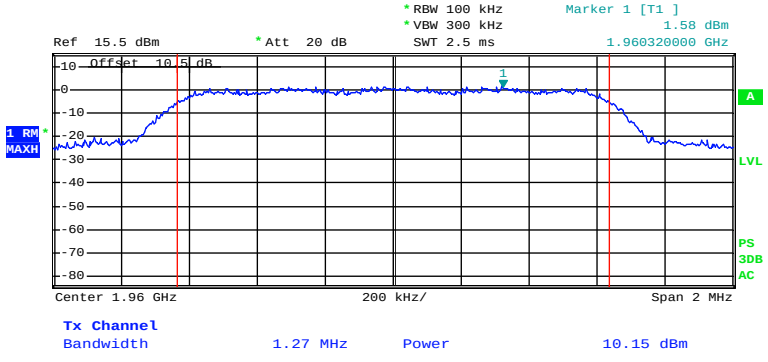
Date: 29.FEB.2012 09:53:23

Downlink, Low Channel



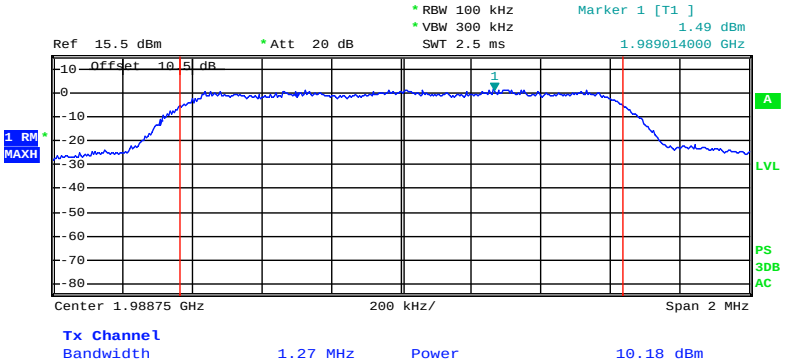
Date: 29.FEB.2012 10:06:11

Downlink, Middle Channel



Date: 29.FEB.2012 10:07:03

Downlink, High Channel



Date: 29.FEB.2012 10:07:41

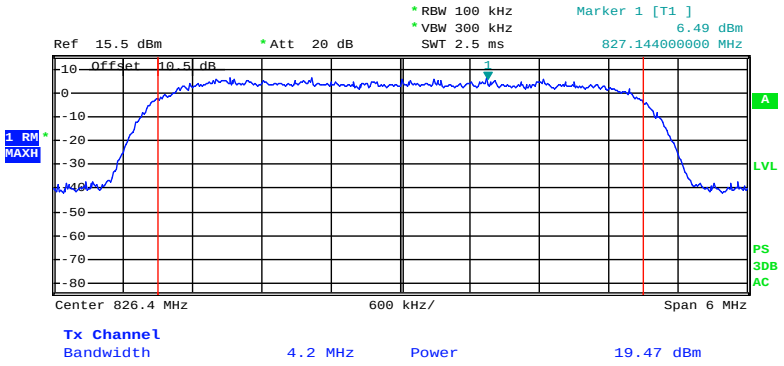
WCDMA:

Mode	Channel	Frequency (MHz)	Output Power (dBm)	
Cellular Band (Part 22H)				
Uplink (824-849 MHz)	Low	826.4		19.47
	Middle	836.6		19.29
	High	846.6		19.33
Downlink (869-894 MHz)	Low	871.4		11.23
	Middle	881.6		11.12
	High	891.6		11.57
PCS Band (Part 24E)				
Uplink (1850-1910 MHz)	Low	1852.4		19.36
	Middle	1880.0		19.43
	High	1907.6		19.21
Downlink (1930-1990 MHz)	Low	1932.4		10.38
	Middle	1960.0		10.28
	High	1987.6		10.49

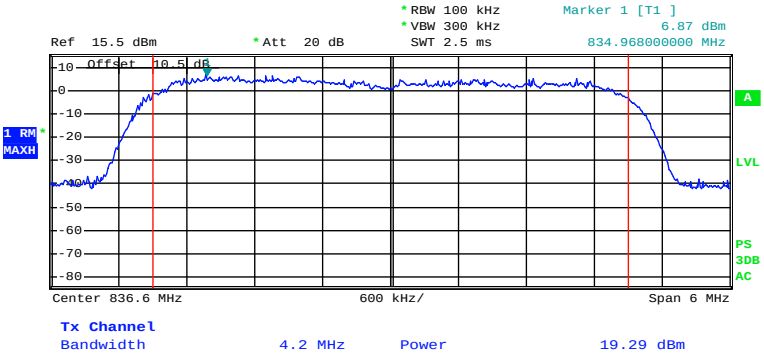
Please see the below plots.

Cellular Band

Uplink, Low Channel

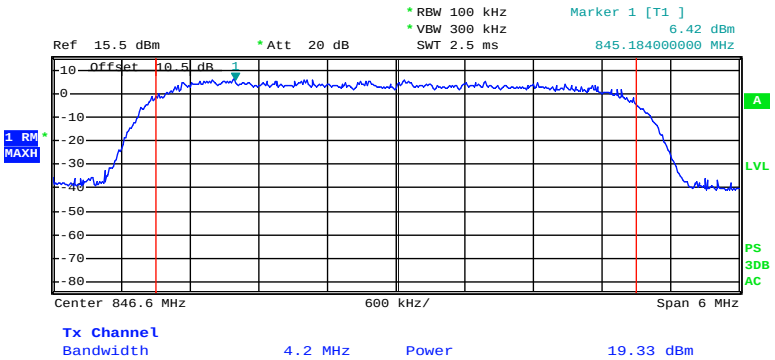


Uplink, Middle Channel



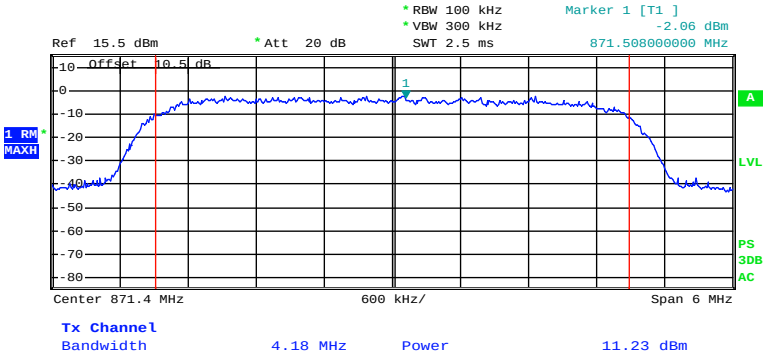
Date: 29.FEB.2012 10:22:40

Uplink, High Channel



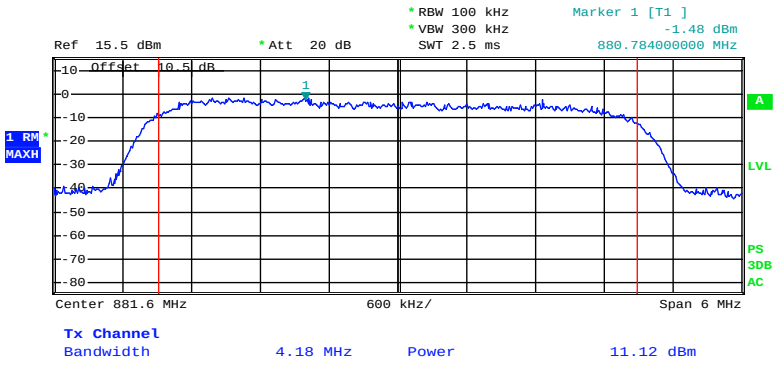
Date: 29.FEB.2012 10:24:40

Downlink, Low Channel



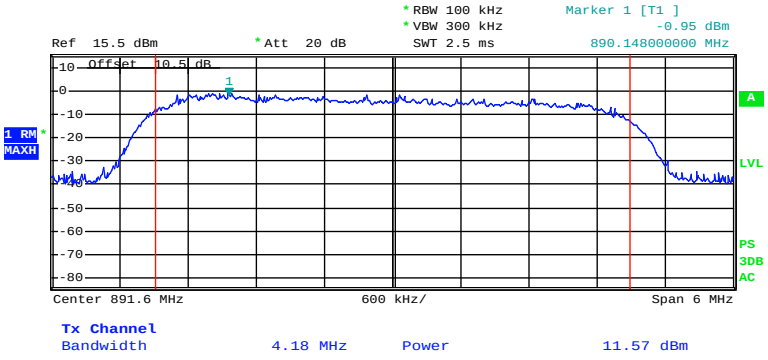
Date: 29.FEB.2012 10:15:03

Downlink, Middle Channel



Date: 29.FEB.2012 10:16:18

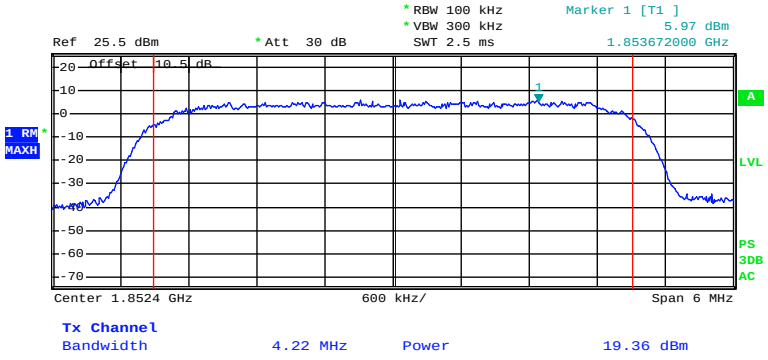
Downlink, High Channel



Date: 29.FEB.2012 10:17:39

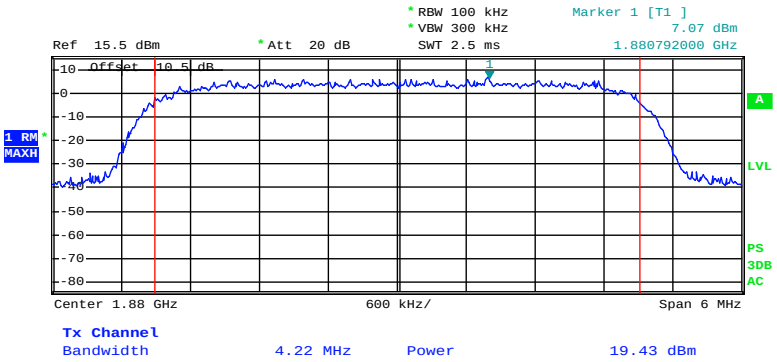
PCS Band

Uplink, Low Channel



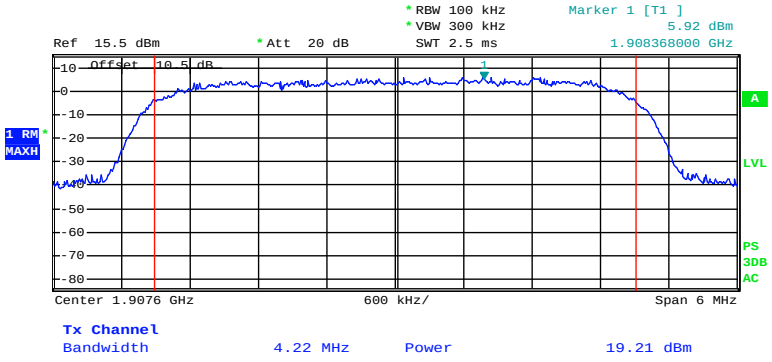
Date: 29.FEB.2012 16:38:52

Uplink, Middle Channel



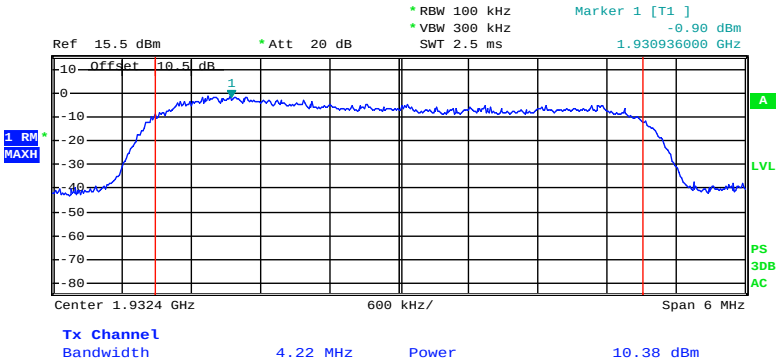
Date: 29.FEB.2012 10:31:15

Uplink, High Channel



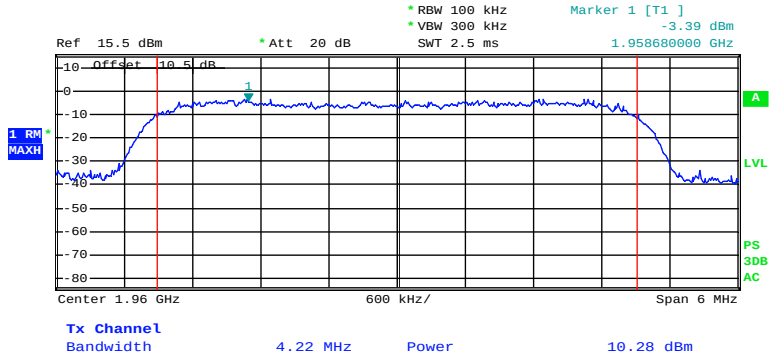
Date: 29.FEB.2012 10:35:04

Downlink, Low Channel



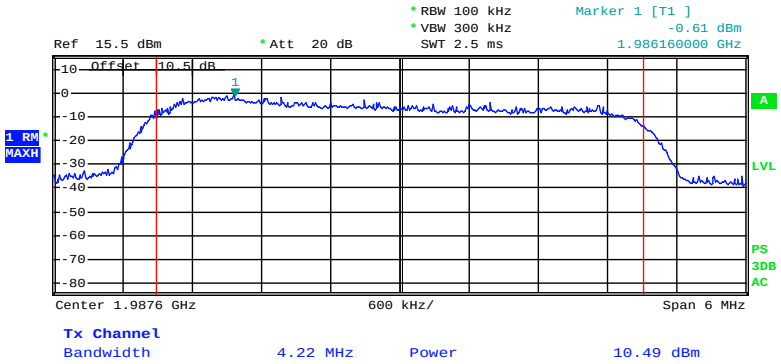
Date: 29.FEB.2012 10:10:50

Downlink, Middle Channel



Date: 29.FEB.2012 10:11:37

Downlink, High Channel



Date: 29.FEB.2012 10:12:06

FCC §2.1049, §22.917, §22.905& §24.238 - OCCUPIED BANDWIDTH

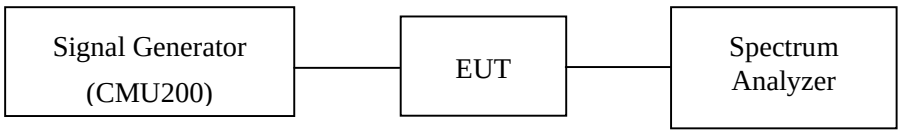
Applicable Standards

FCC §2.1049, §22.917, §22.905 and §24.238.

Test Procedure

The RF output of the transmitter was connected to the simulator and the spectrum analyzer through sufficient attenuation.

The resolution bandwidth of the spectrum analyzer was set at 1% of occupied bandwidth (Cellular /PCS) and the 26 dB & 99% bandwidth was recorded.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100224	2011-11-11	2012-11-10

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56%
ATM Pressure:	100.0kPa

The testing was performed by Henry Ding on 2012-01-04, 2012-01-20 and 2012-02-22.

GSM (GMSK):

Input signal

Mode	Frequency (MHz)	99%Bandwidth (kHz)	26 dB Bandwidth (kHz)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	836.6	238.00	294.00
Downlink (869-894 MHz)	881.6	240.00	294.00
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1880.0	240.00	294.00
Downlink (1930-1990 MHz)	1960.0	238.00	294.00

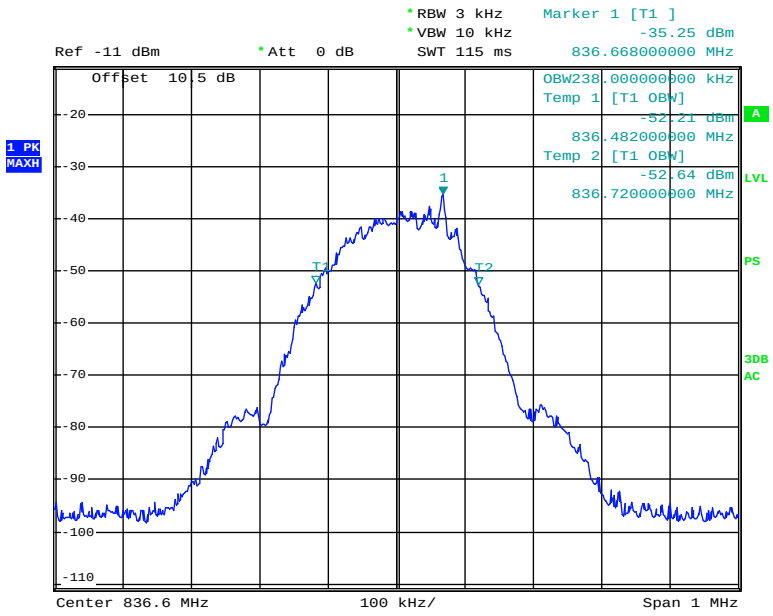
Output signal

Mode	Frequency (MHz)	99%Bandwidth (kHz)	26 dB Bandwidth (kHz)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	836.6	238.00	296.00
Downlink (869-894 MHz)	881.6	238.00	296.00
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1880.0	238.00	296.00
Downlink (1930-1990 MHz)	1960.0	240.00	294.00

Please refer to the following plots.

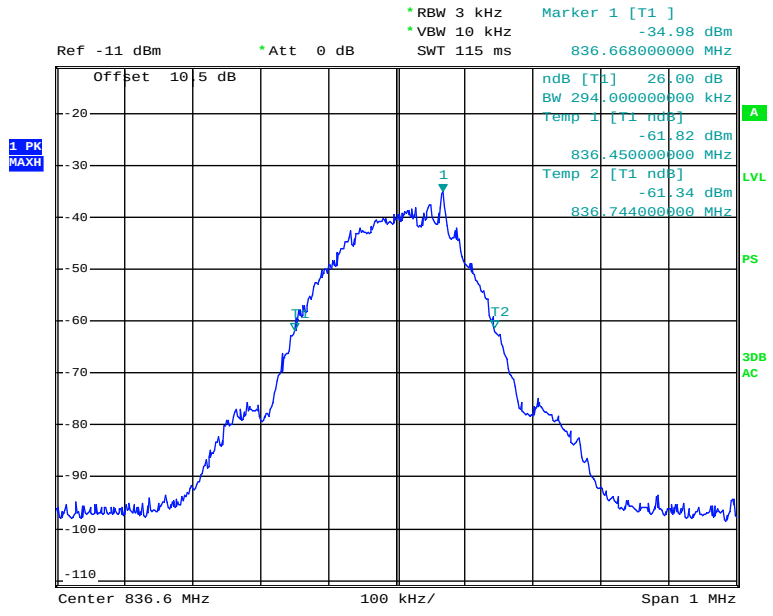
Cellular Band (Part 22H)

Input Signal, Uplink, 99% Bandwidth, Middle Channel



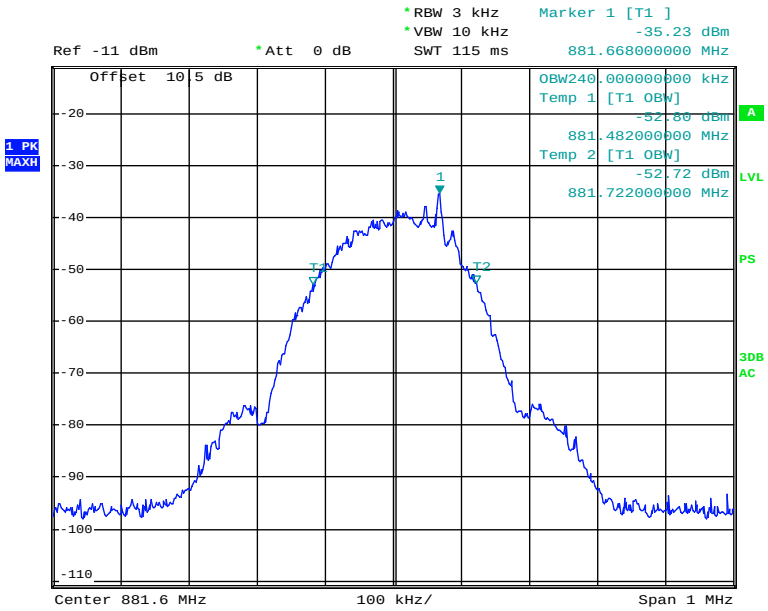
Date: 4.JAN.2012 11:55:06

Input Signal, Uplink, 26 dB Bandwidth, Middle Channel



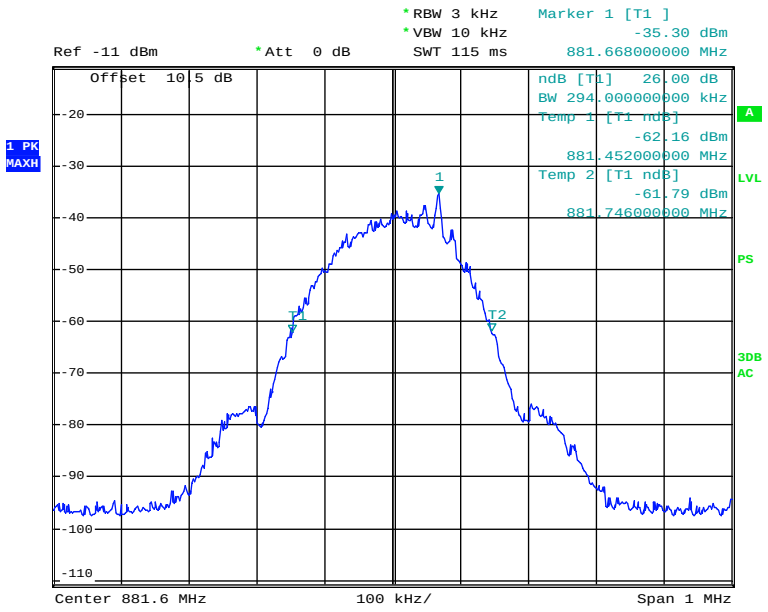
Date: 4.JAN.2012 11:55:26

Input Signal, Downlink, 99% Bandwidth, Middle Channel



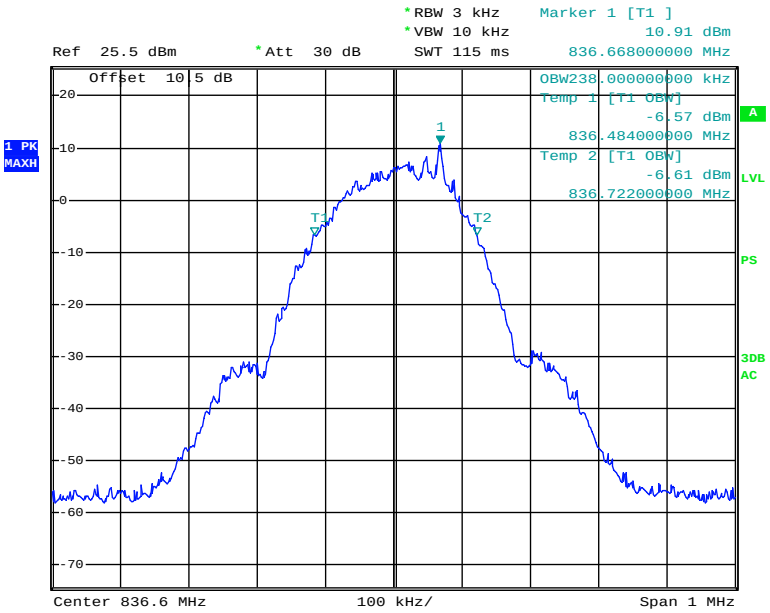
Date: 4.JAN.2012 11:58:30

Input Signal, Downlink, 26 dB Bandwidth, Middle Channel



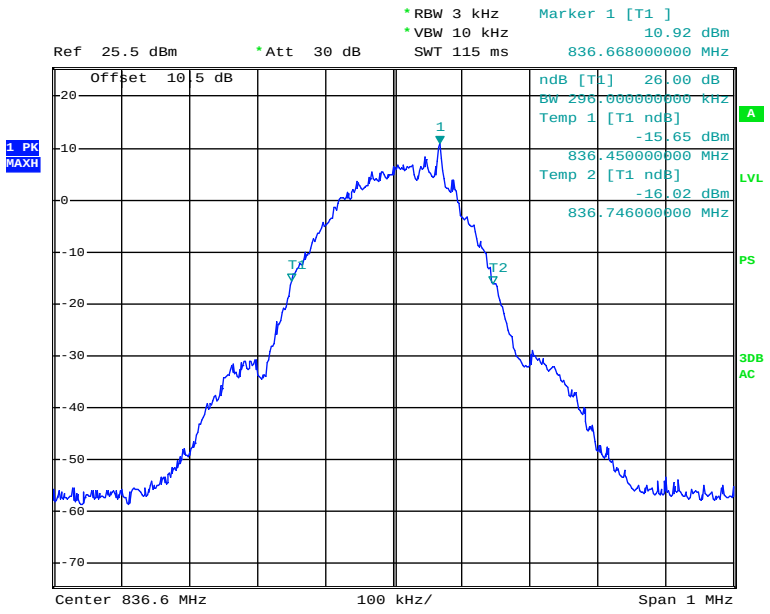
Date: 4.JAN.2012 11:58:04

Output Signal, Uplink, 99% Bandwidth, Middle Channel



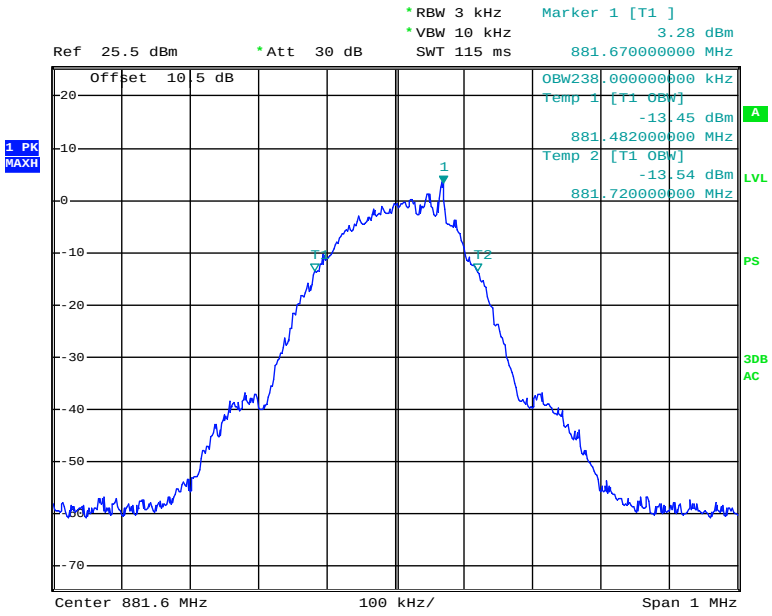
Date: 4.JAN.2012 11:42:05

Output Signal, Uplink, 26 dB Bandwidth, Middle Channel



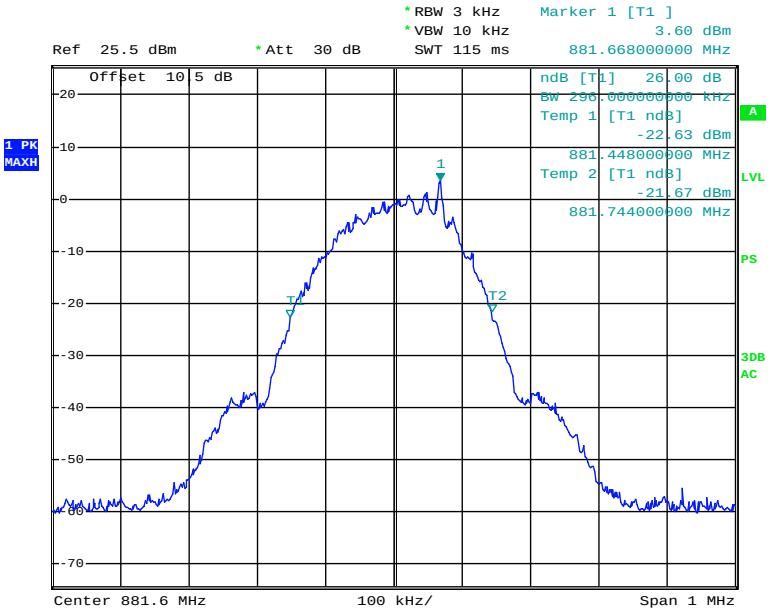
Date: 4.JAN.2012 11:42:41

Output Signal, Downlink, 99% Bandwidth, Middle Channel



Date: 4.JAN.2012 11:19:28

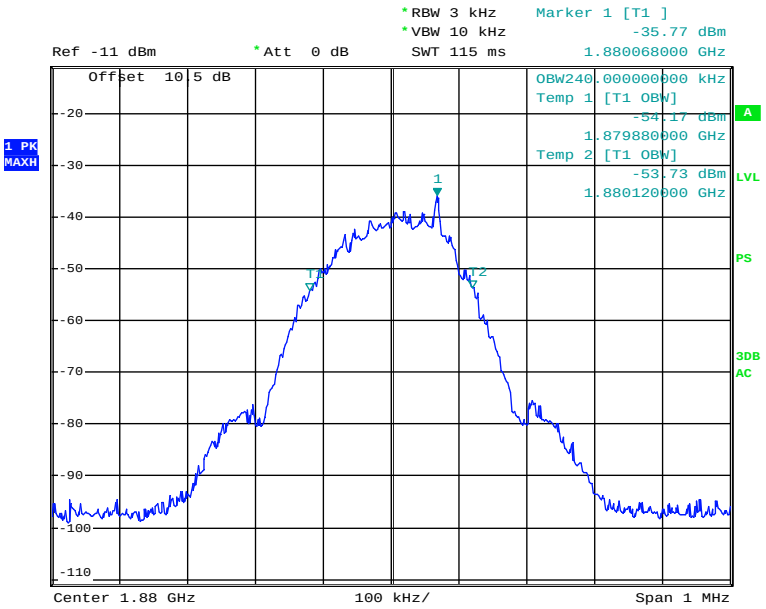
Output Signal, Downlink, 26 dB Bandwidth, Middle Channel



Date: 4.JAN.2012 11:18:58

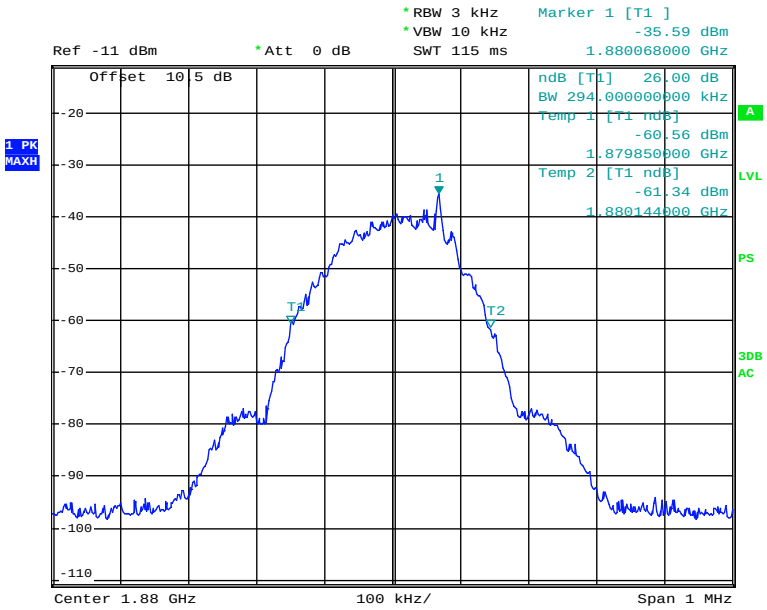
PCS Band (Part 24E)

Input Signal, Uplink, 99% Bandwidth, Middle Channel



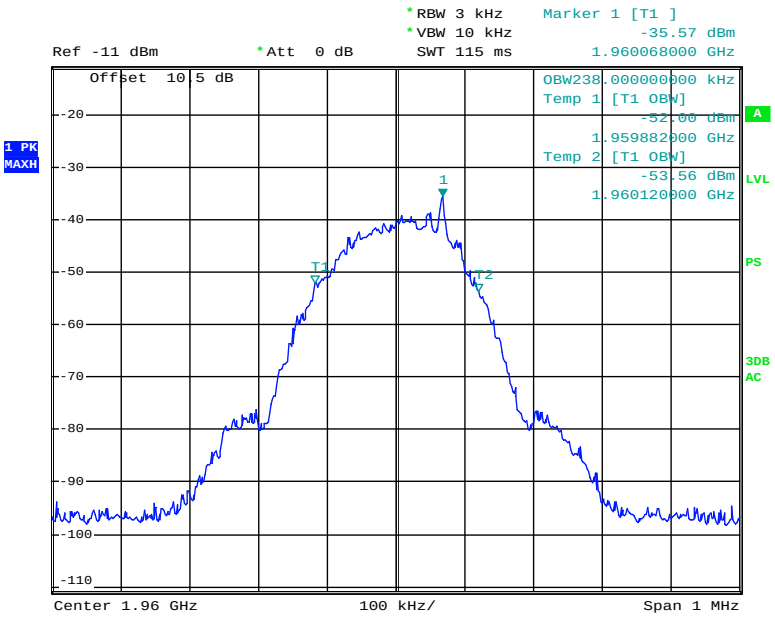
Date: 4.JAN.2012 12:01:12

Input Signal, Uplink, 26 dB Bandwidth, Middle Channel



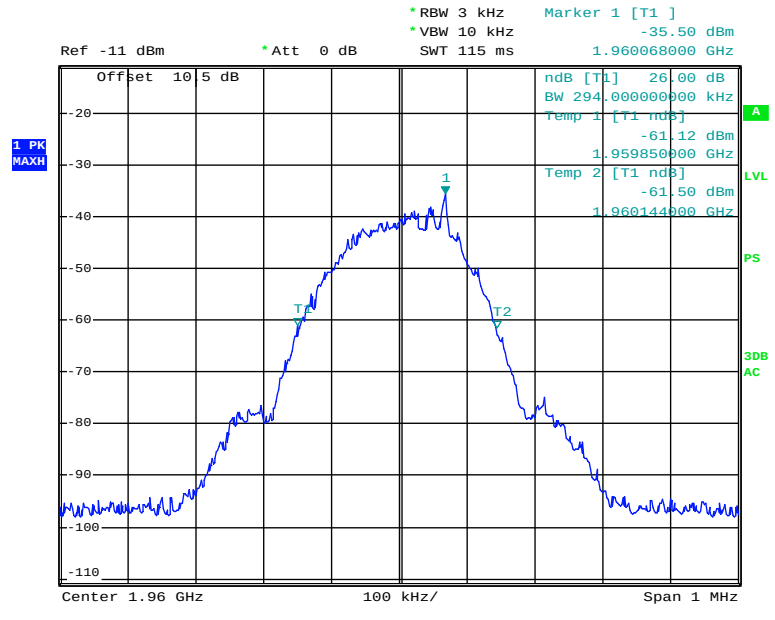
Date: 4.JAN.2012 12:01:30

Input Signal, Downlink, 99% Bandwidth, Middle Channel



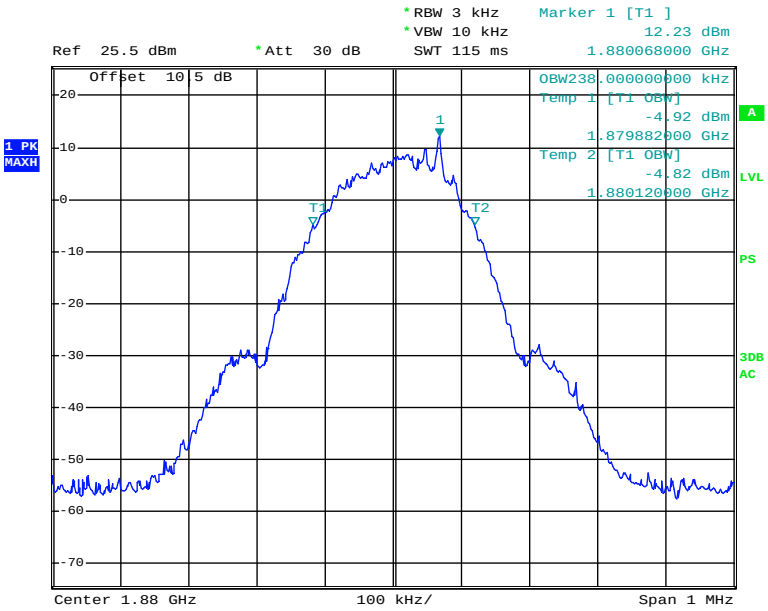
Date: 4.JAN.2012 12:03:46

Input Signal, Downlink, 26 dB Bandwidth, Middle Channel



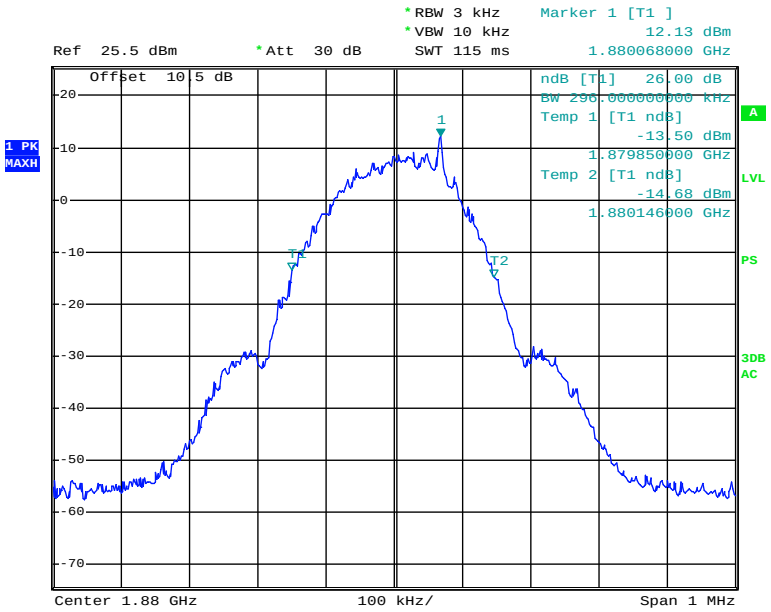
Date: 4.JAN.2012 12:03:28

Output Signal, Uplink, 99% Bandwidth, Middle Channel



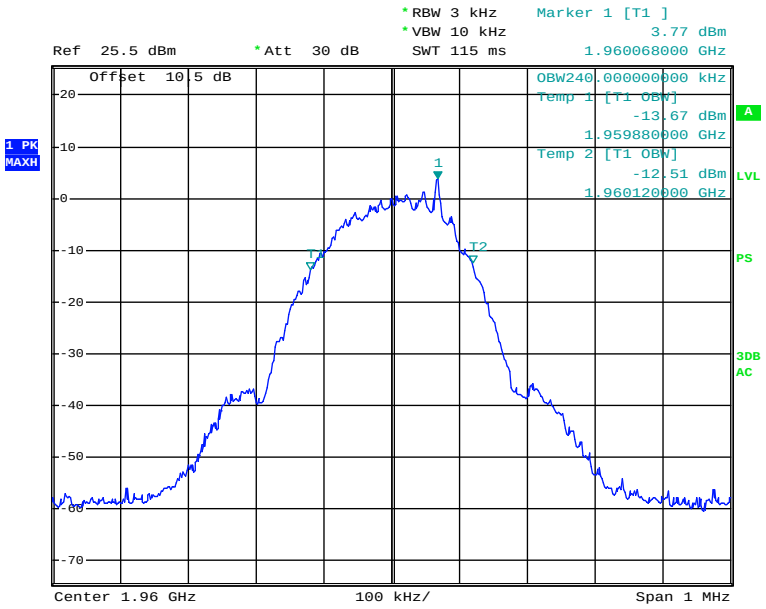
Date: 4.JAN.2012 10:55:47

Output Signal, Uplink, 26 dB Bandwidth, Middle Channel



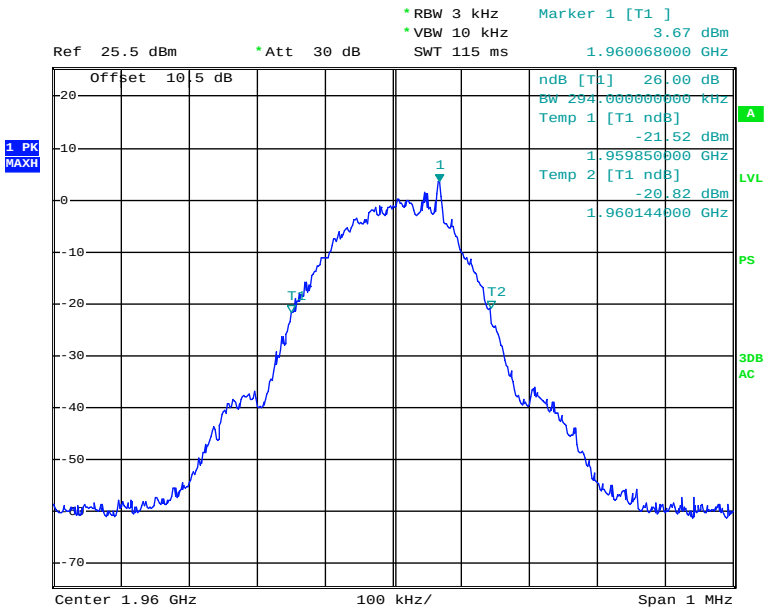
Date: 4.JAN.2012 10:55:21

Output Signal, Downlink, 99% Bandwidth, Middle Channel



Date: 4.JAN.2012 11:13:50

Output Signal, Downlink, 26 dB Bandwidth, Middle Channel



Date: 4.JAN.2012 11:14:13

EDGE (8PSK):

Input signal

Mode	Frequency (MHz)	99%Bandwidth (kHz)	26 dB Bandwidth (kHz)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	836.6	236.00	290.00
Downlink (869-894 MHz)	881.6	244.00	298.00
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1880.0	238.00	296.00
Downlink (1930-1990 MHz)	1960.0	236.00	292.00

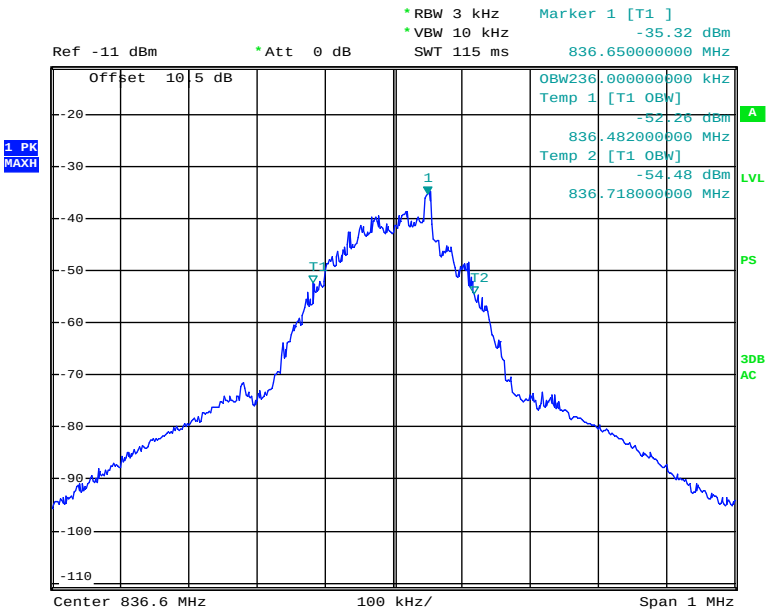
Output signal

Mode	Frequency (MHz)	99%Bandwidth (kHz)	26 dB Bandwidth (kHz)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	836.6	240.00	286.00
Downlink (869-894 MHz)	881.6	242.00	298.00
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1880.0	242.00	290.00
Downlink (1930-1990 MHz)	1960.0	240.00	296.00

Please refer to the following plots.

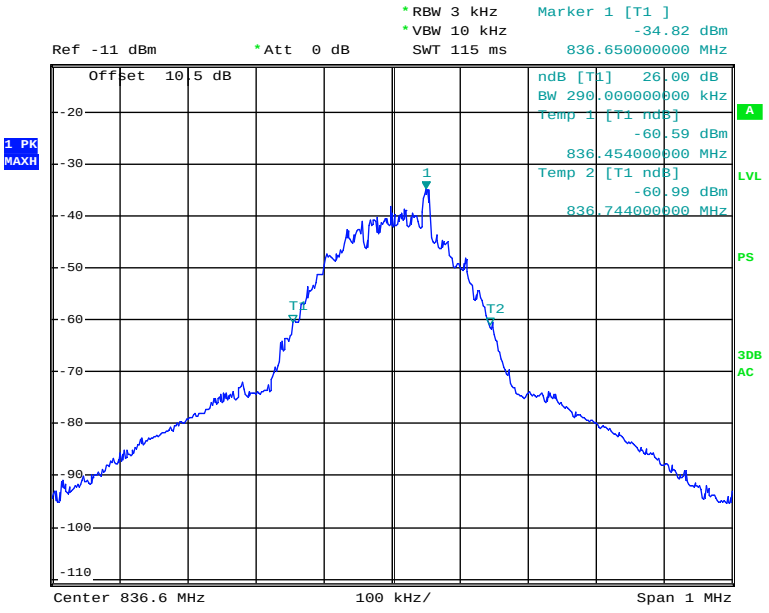
Cellular Band (Part 22H)

Input Signal, Uplink, 99% Bandwidth, Middle Channel



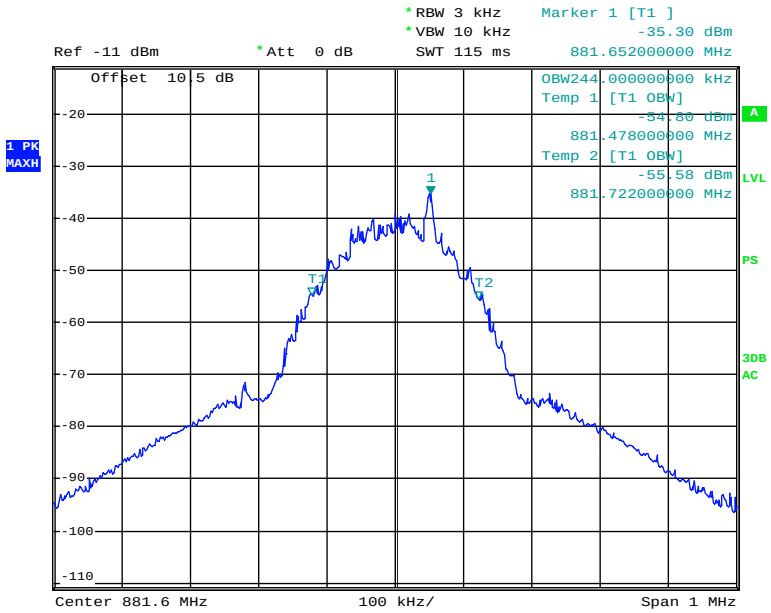
Date: 4.JAN.2012 12:11:00

Output Signal, Uplink, 26 dB Bandwidth, Middle Channel



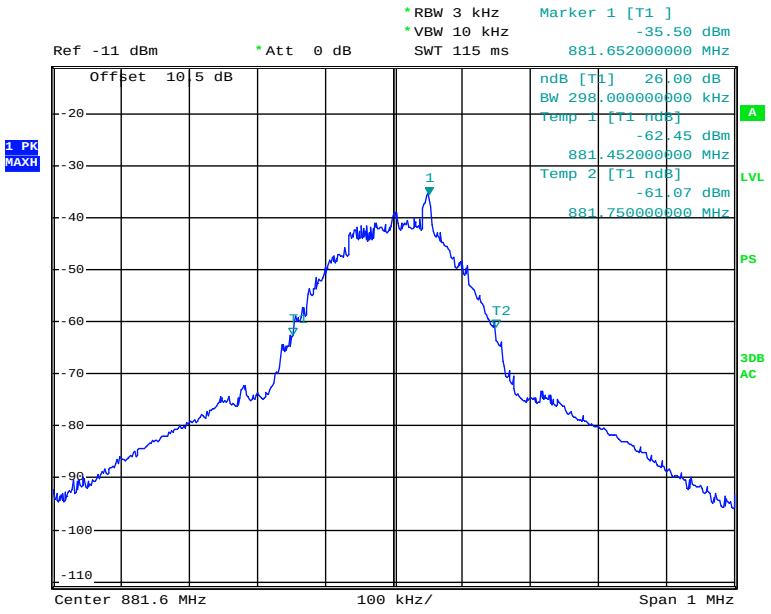
Date: 4.JAN.2012 12:11:37

Input Signal, Downlink, 99% Bandwidth, Middle Channel



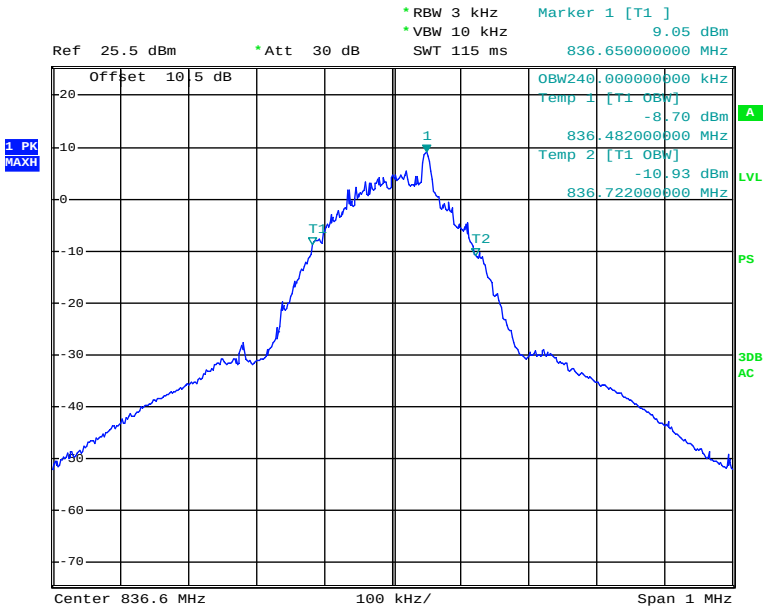
Date: 4.JAN.2012 12:15:16

Output Signal, Downlink, 26 dB Bandwidth, Middle Channel



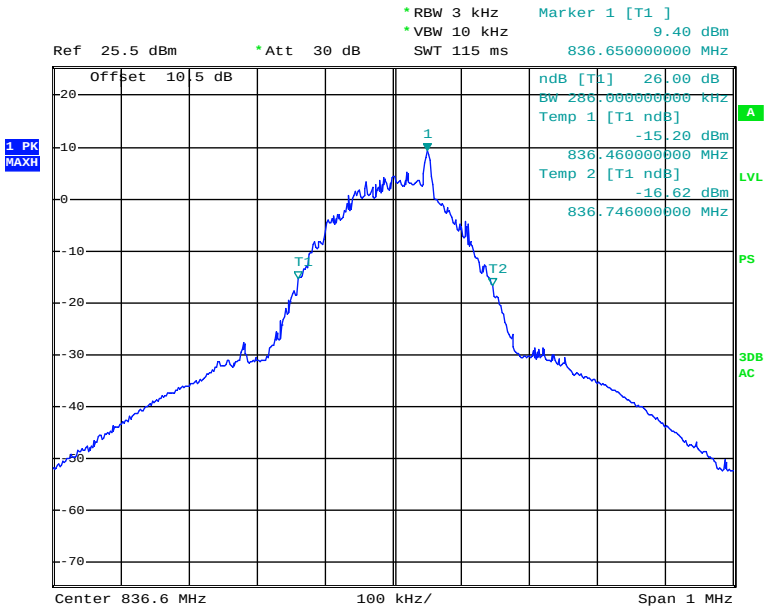
Date: 4.JAN.2012 12:14:49

Output Signal, Uplink, 99% Bandwidth, Middle Channel



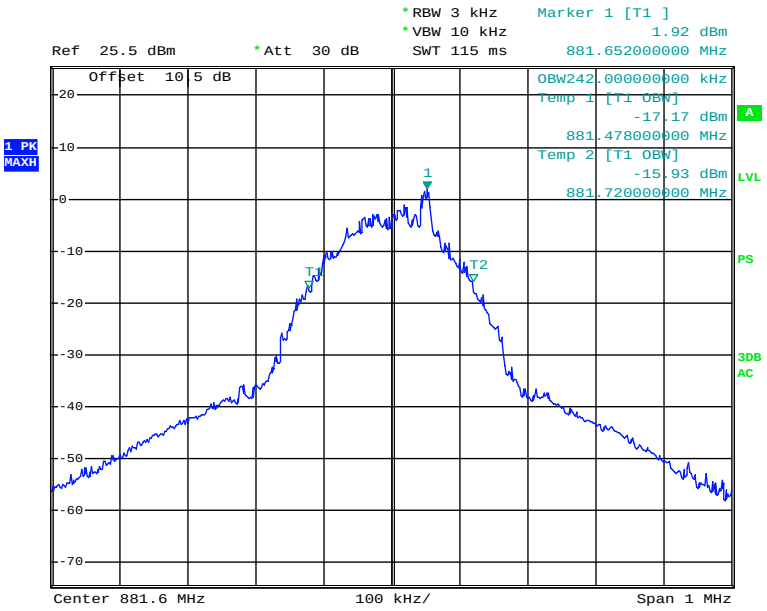
Date: 4.JAN.2012 11:38:08

Output Signal, Uplink, 26 dB Bandwidth, Middle Channel



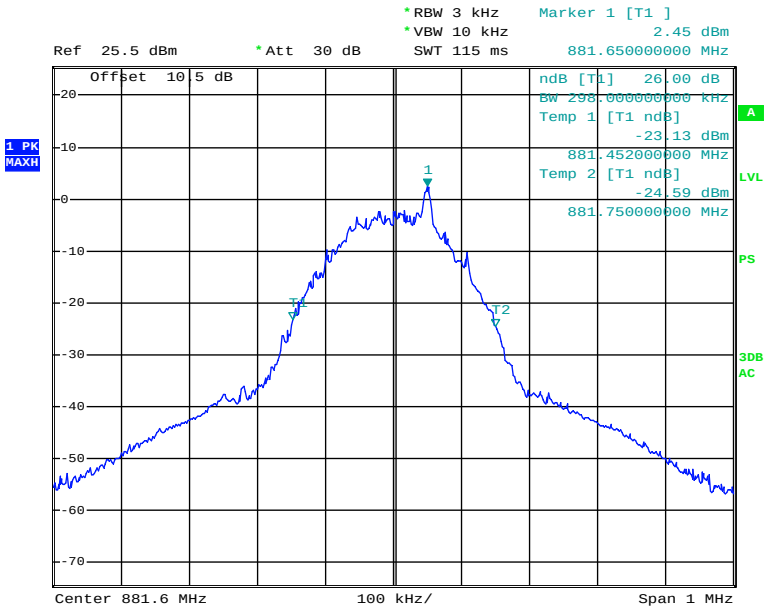
Date: 4.JAN.2012 11:37:02

Output Signal, Downlink, 99% Bandwidth, Middle Channel



Date: 4.JAN.2012 11:28:25

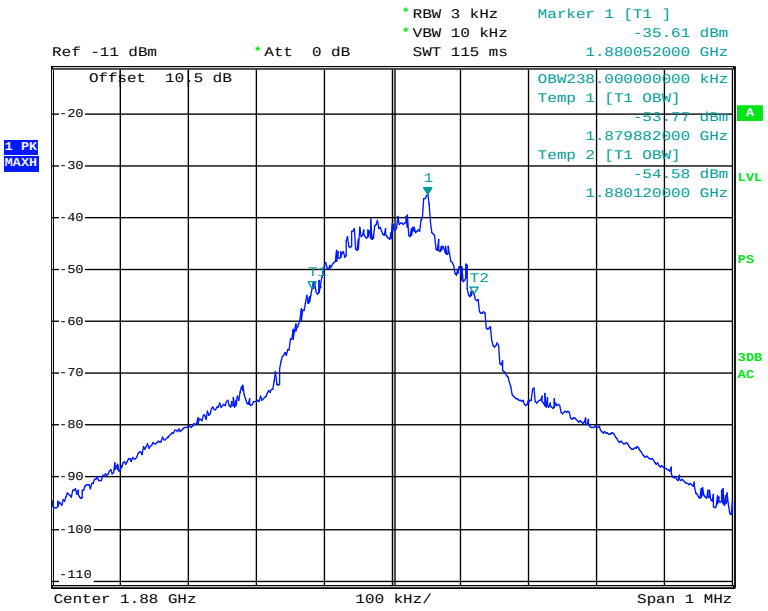
Output Signal, Downlink, 26 dB Bandwidth, Middle Channel



Date: 4.JAN.2012 11:29:19

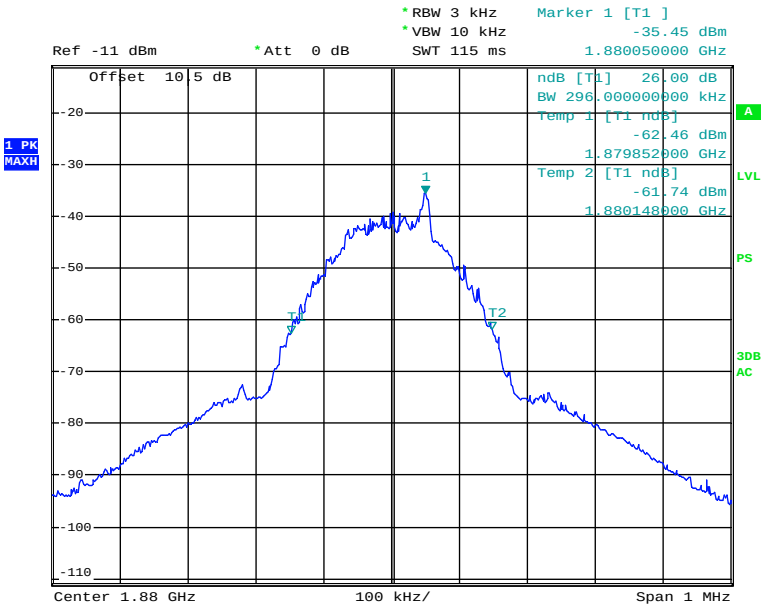
PCS Band (Part 24E)

Input Signal, Uplink, 99% Bandwidth, Middle Channel



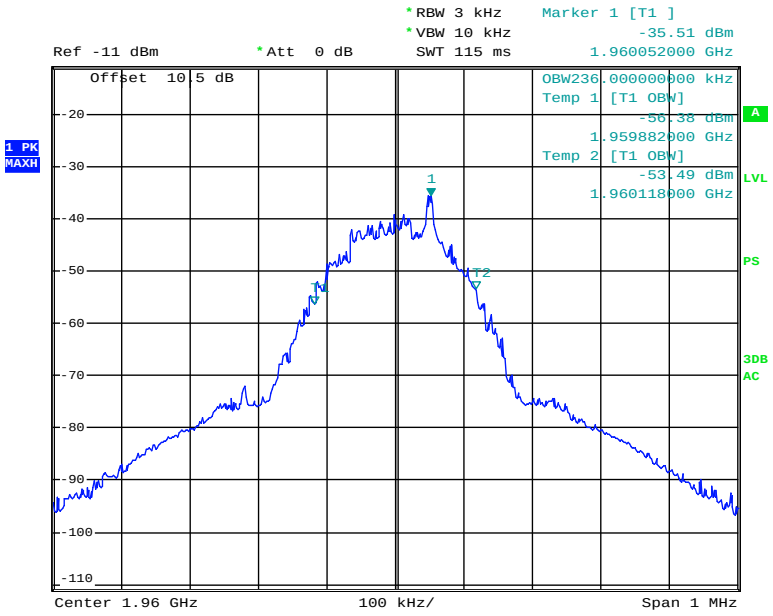
Date: 4.JAN.2012 12:24:21

Input Signal, Uplink, 26 dB Bandwidth, Middle Channel



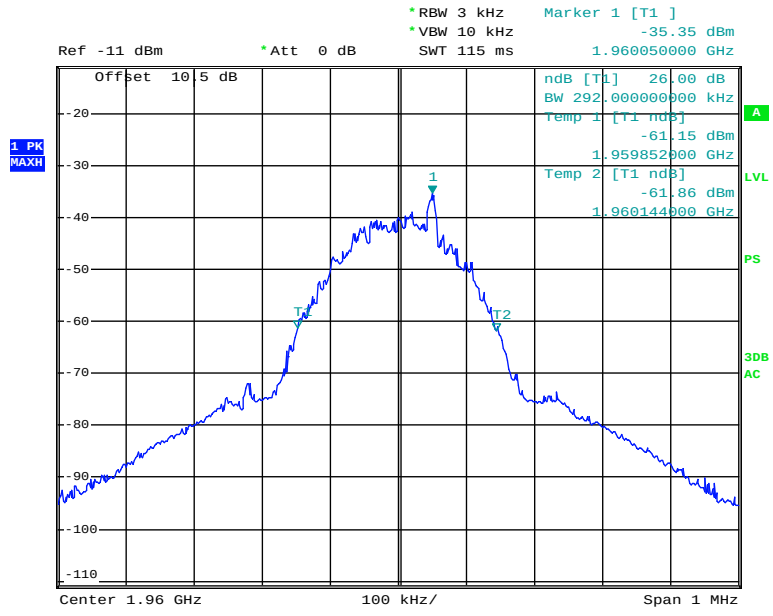
Date: 4.JAN.2012 12:25:08

Input Signal, Downlink, 99% Bandwidth, Middle Channel



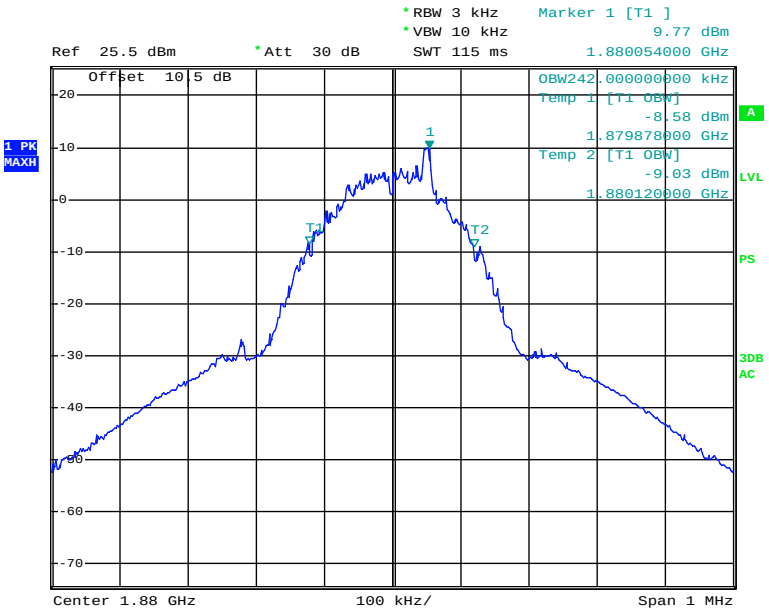
Date: 4.JAN.2012 12:29:00

Input Signal, Downlink, 26 dB Bandwidth, Middle Channel



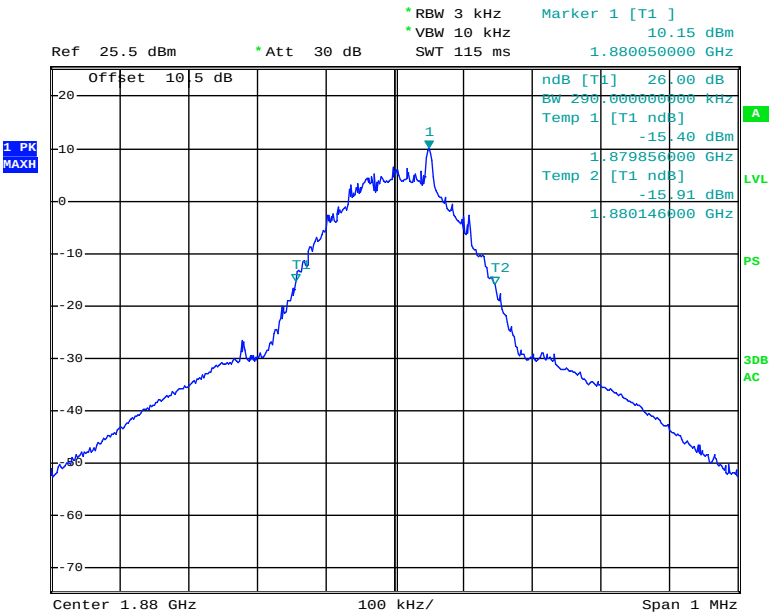
Date: 4.JAN.2012 12:28:39

Output Signal, Uplink, 99% Bandwidth, Middle Channel



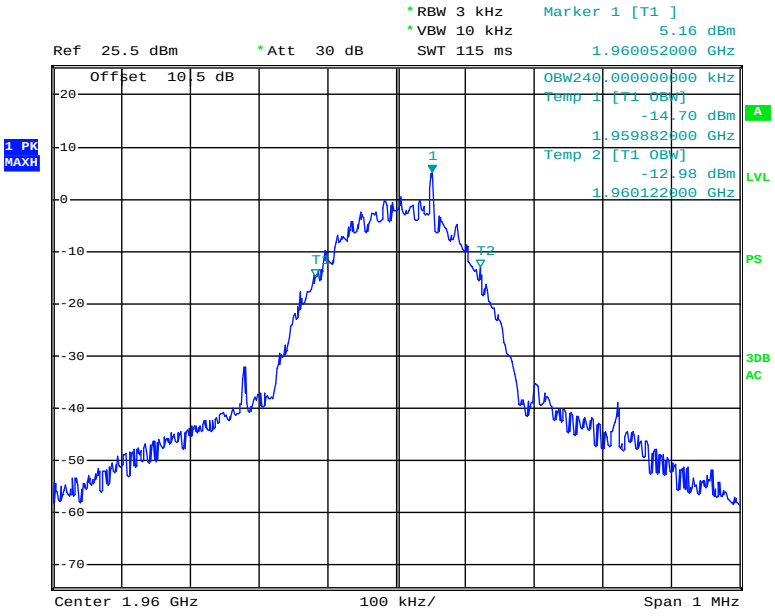
Date: 4.JAN.2012 11:00:25

Output Signal, Uplink, 26 dB Bandwidth, Middle Channel



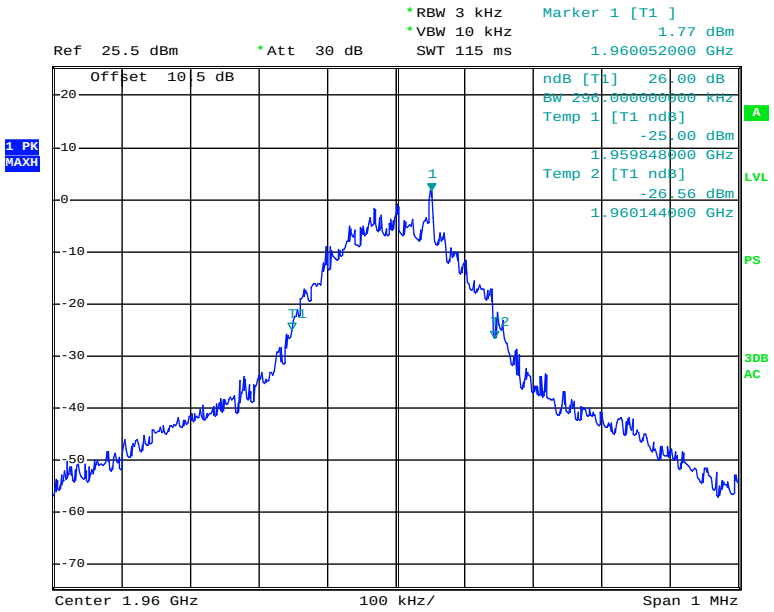
Date: 4.JAN.2012 11:01:06

Output Signal, Downlink, 99% Bandwidth, Middle Channel



Date: 22.FEB.2012 09:09:00

Output Signal, Downlink, 26 dB Bandwidth, Middle Channel



Date: 22.FEB.2012 09:04:38

CDMA:

Input signal

Mode	Frequency (MHz)	99%Bandwidth (MHz)	26 dB Bandwidth (MHz)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	836.52	1.2800	1.4300
Downlink (869-894 MHz)	881.52	1.2800	1.4400
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1880.00	1.2600	1.4400
Downlink (1930-1990 MHz)	1960.00	1.2700	1.4300

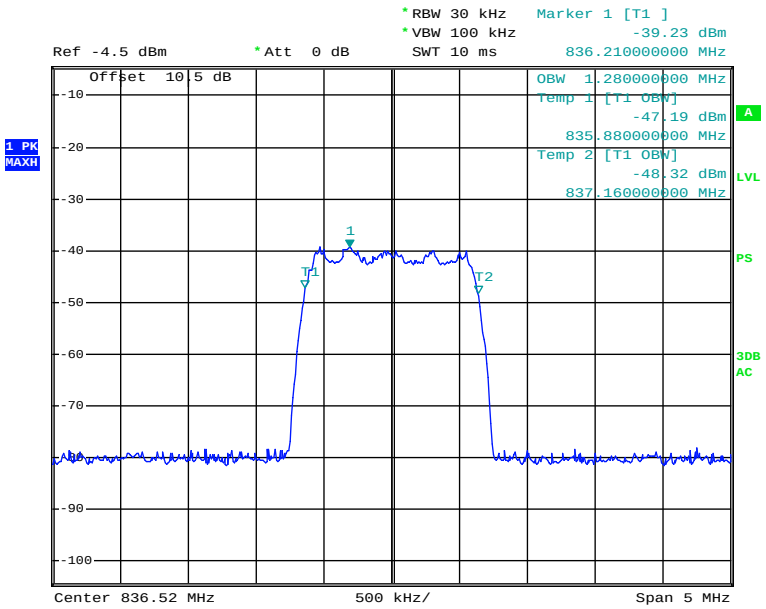
Output signal

Mode	Frequency (MHz)	99%Bandwidth (MHz)	26 dB Bandwidth (MHz)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	836.52	1.2800	1.4400
Downlink (869-894 MHz)	881.52	1.2700	1.4500
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1880.00	1.2700	1.4400
Downlink (1930-1990 MHz)	1960.00	1.2700	1.4500

Please refer to the following plots.

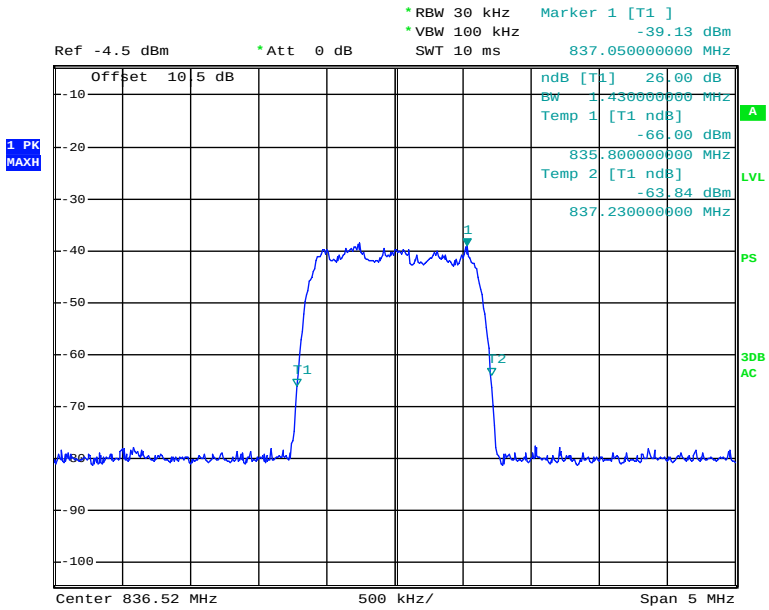
Cellular Band (Part 22H)

Input Signal, Uplink, 99% Bandwidth, Middle Channel



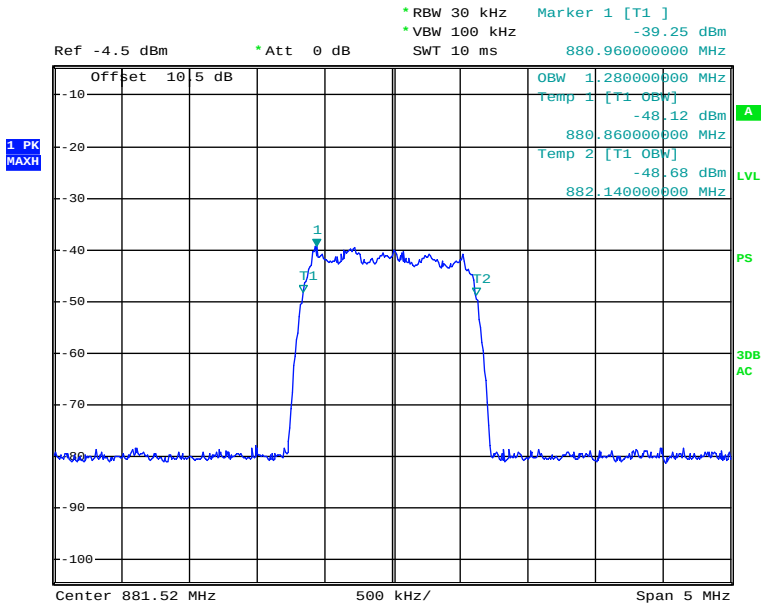
Date: 4.JAN.2012 06:24:00

Input Signal, Uplink, 26 dB Bandwidth, Middle Channel



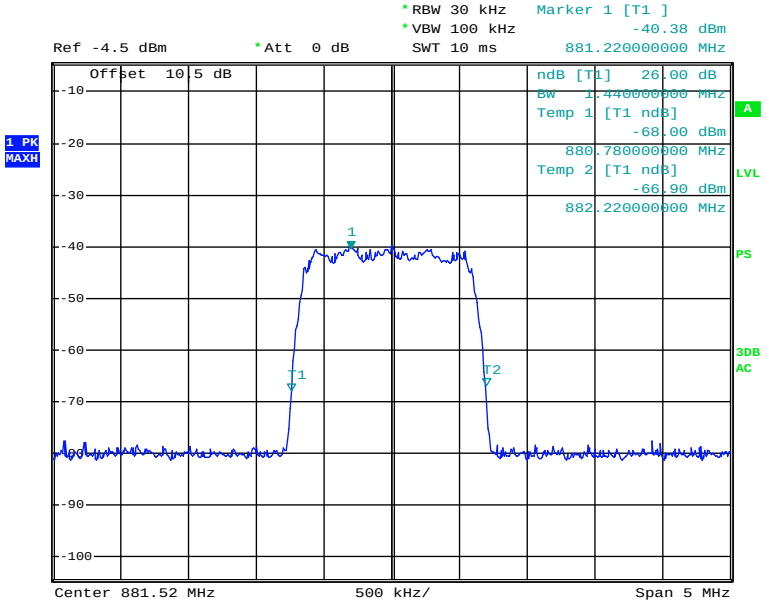
Date: 4.JAN.2012 06:24:35

Input Signal, Downlink, 99% Bandwidth, Middle Channel



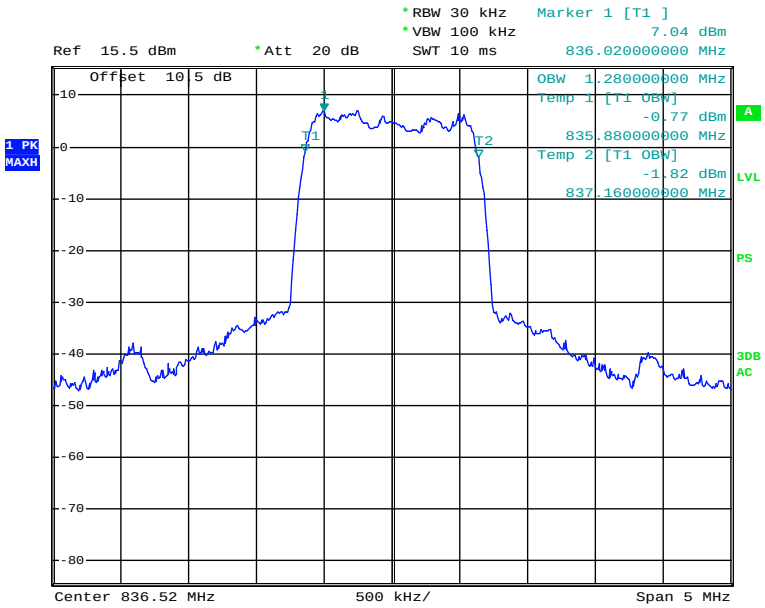
Date: 4.JAN.2012 06:32:36

Input Signal, Downlink, 26 dB Bandwidth, Middle Channel



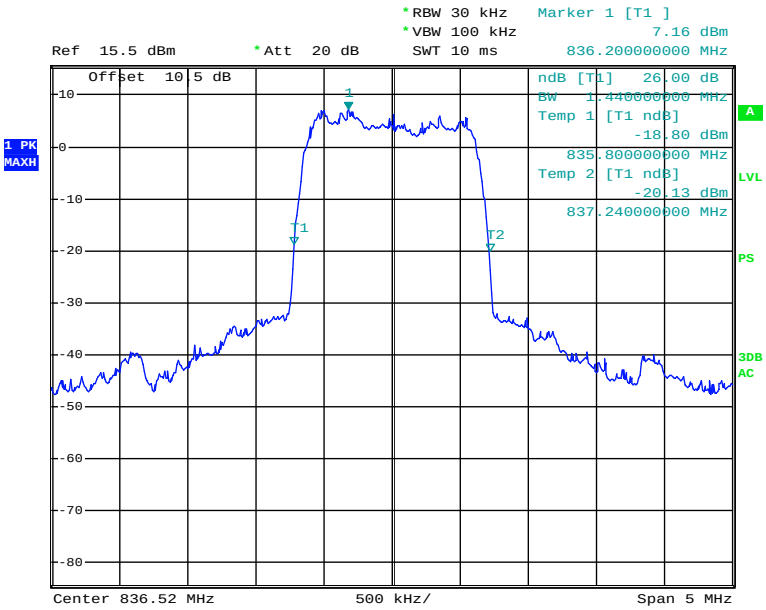
Date: 4.JAN.2012 06:31:57

Output Signal, Uplink, 99% Bandwidth, Middle Channel



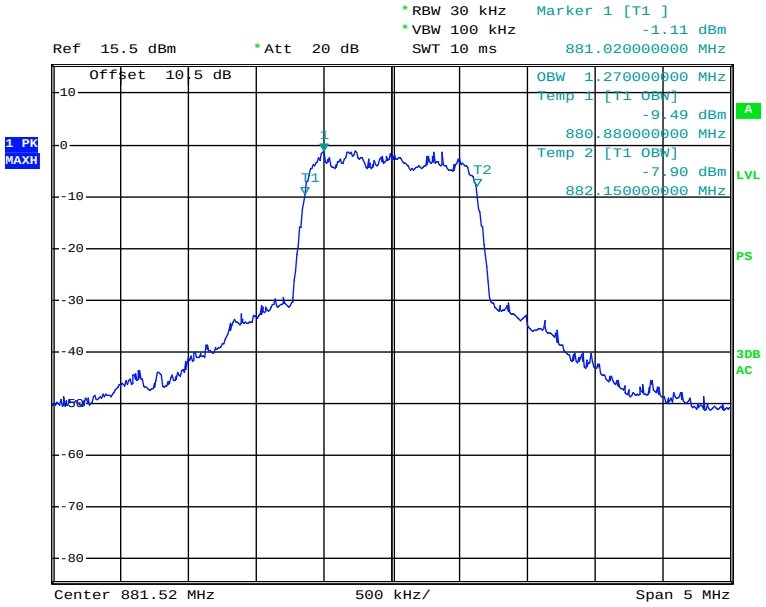
Date: 4.JAN.2012 06:15:03

Output Signal, Uplink, 26 dB Bandwidth, Middle Channel



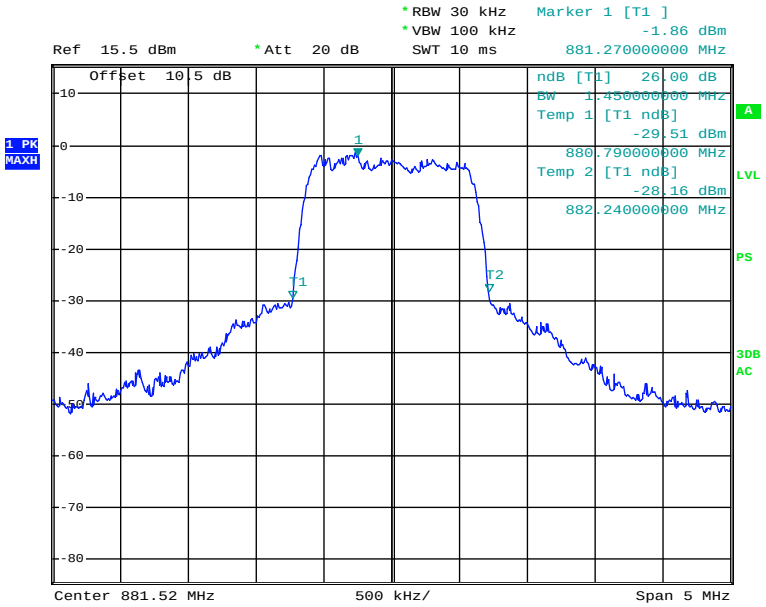
Date: 4.JAN.2012 06:15:37

Output Signal, Downlink, 99% Bandwidth, Middle Channel



Date: 4.JAN.2012 05:55:30

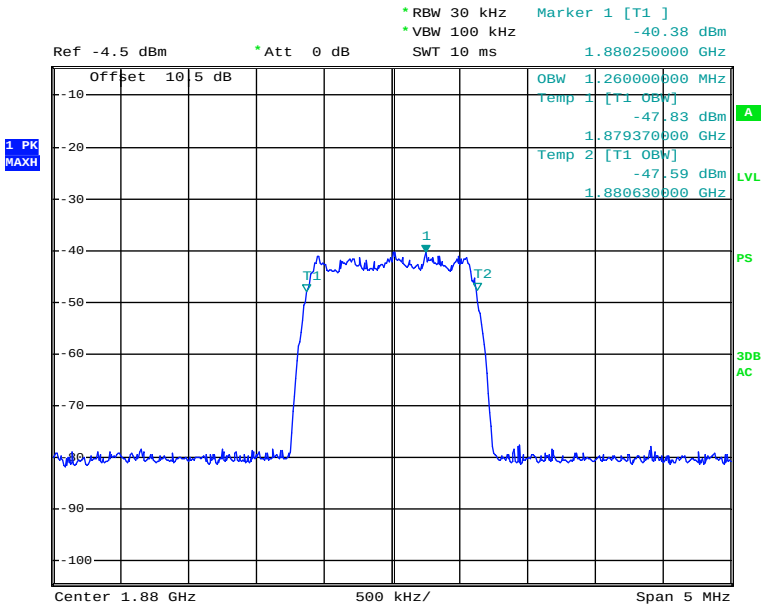
Output Signal, Downlink, 26 dB Bandwidth, Middle Channel



Date: 4.JAN.2012 05:54:54

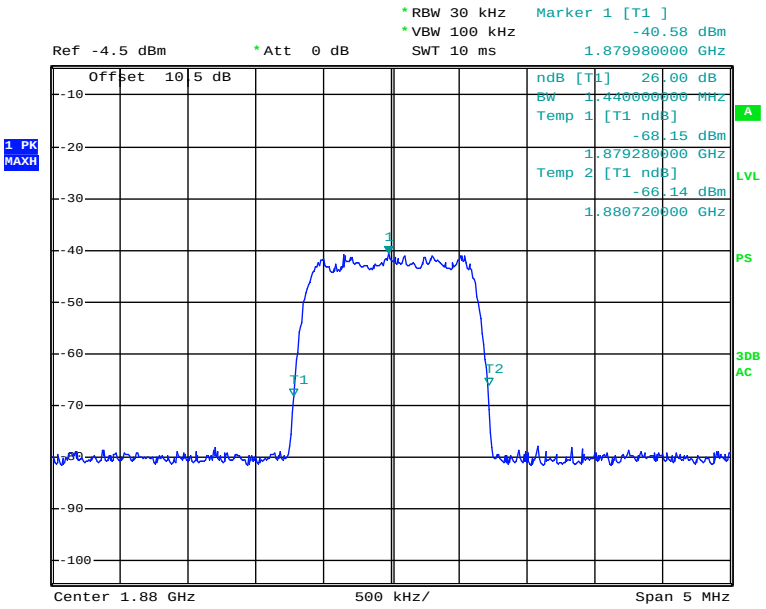
PCS Band (Part 24E)

Input Signal, Uplink, 99% Bandwidth, Middle Channel



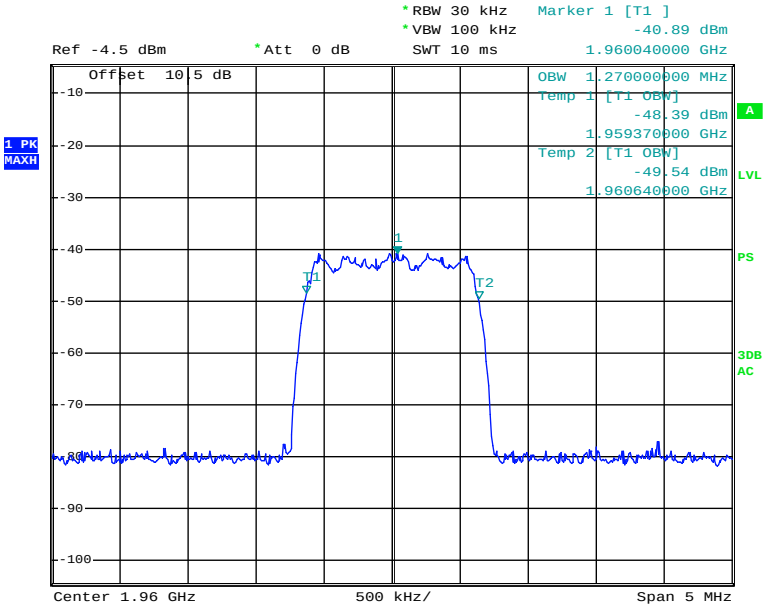
Date: 4.JAN.2012 06:43:42

Input Signal, Uplink, 26 dB Bandwidth, Middle Channel



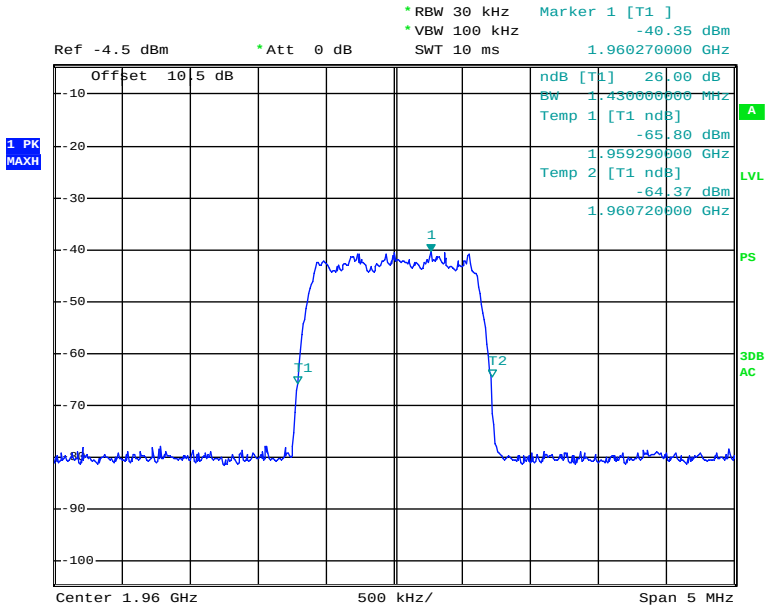
Date: 4.JAN.2012 06:43:10

Input Signal, Downlink, 99% Bandwidth, Middle Channel



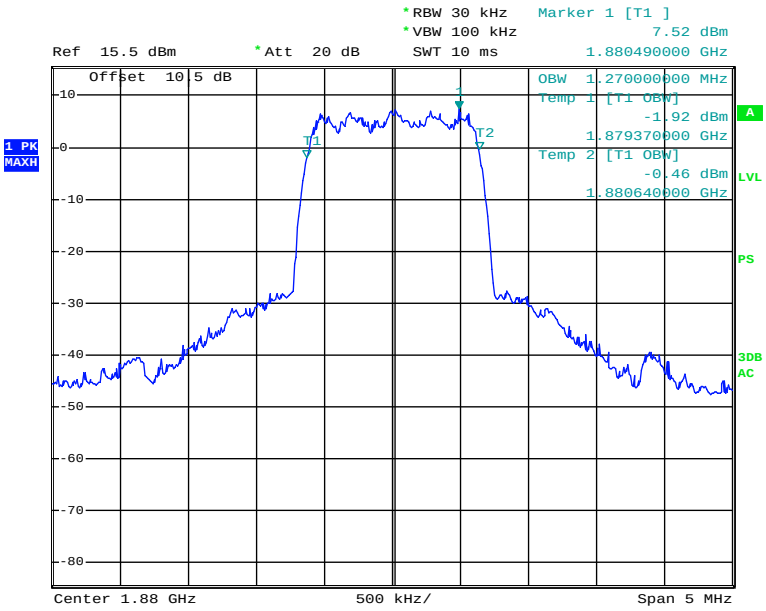
Date: 4.JAN.2012 06:35:58

Input Signal, Downlink, 26 dB Bandwidth, Middle Channel



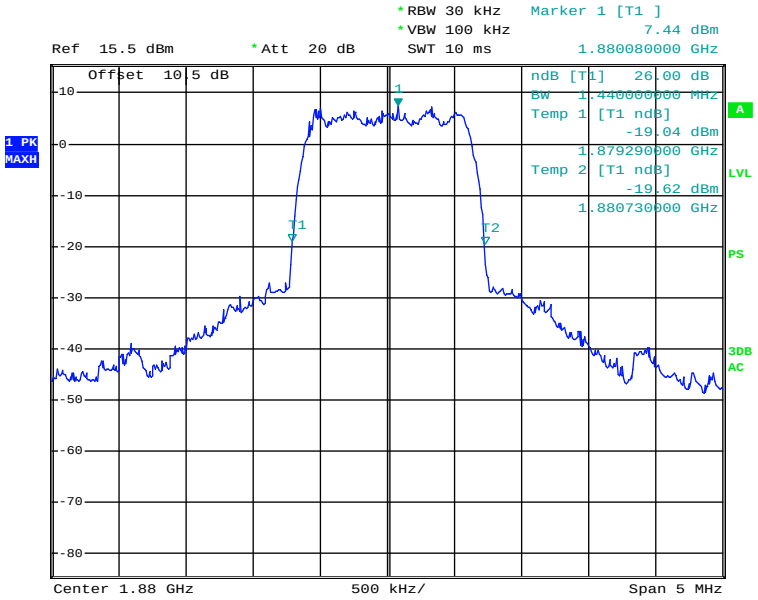
Date: 4.JAN.2012 06:36:25

Output Signal, Uplink, 99% Bandwidth, Middle Channel



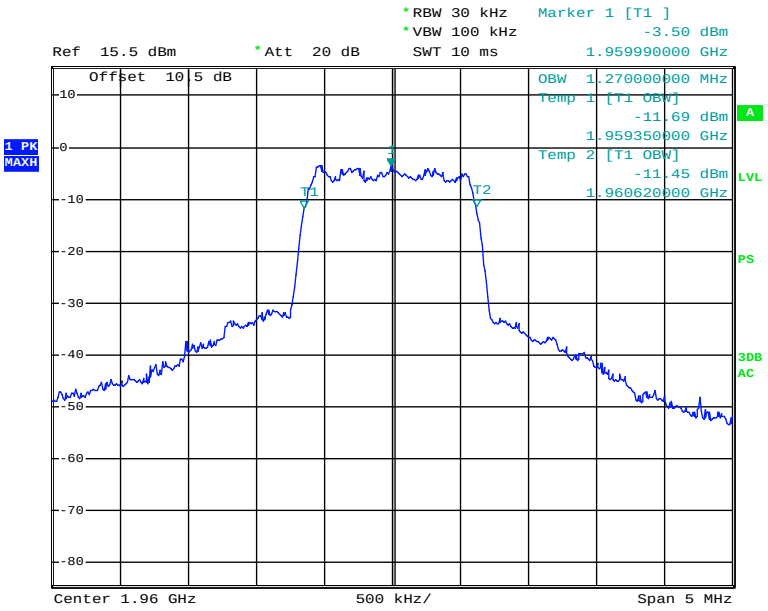
Date: 4.JAN.2012 06:08:46

Output Signal, Uplink, 26 dB Bandwidth, Middle Channel



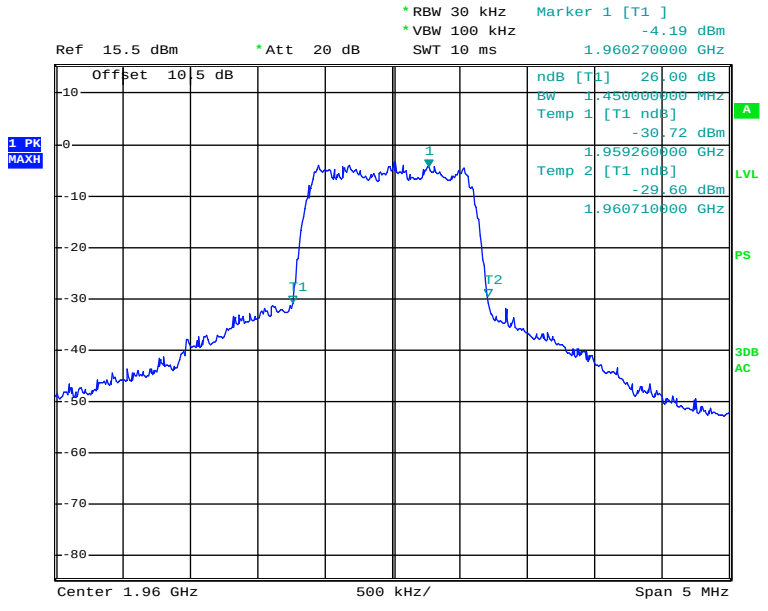
Date: 4.JAN.2012 06:08:16

Output Signal, Downlink, 99% Bandwidth, Middle Channel



Date: 4.JAN.2012 06:01:39

Output Signal, Downlink, 26 dB Bandwidth, Middle Channel



Date: 4.JAN.2012 06:02:31

WCDMA:

Input signal

Mode	Frequency (MHz)	99%Bandwidth (MHz)	26 dB Bandwidth (MHz)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	836.6	4.220	4.740
Downlink (869-894 MHz)	881.6	4.220	4.740
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1880	4.200	4.720
Downlink (1930-1990 MHz)	1960	4.220	4.740

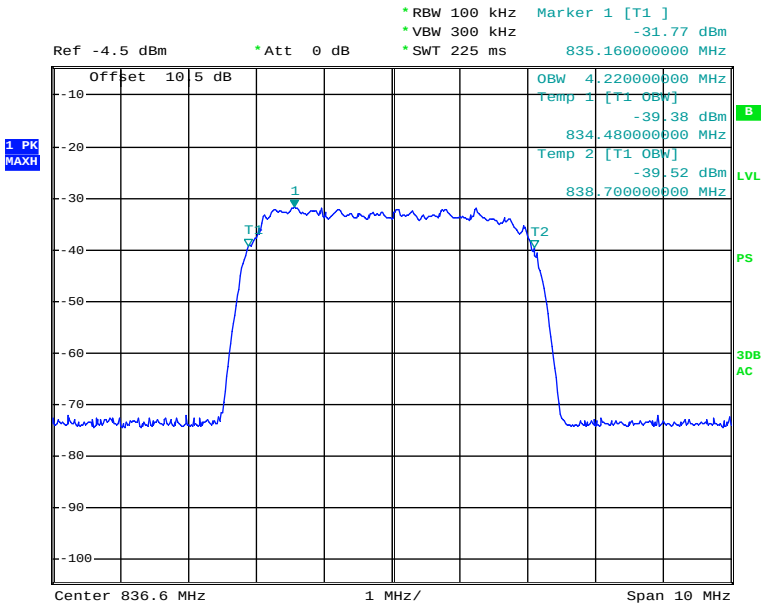
Output signal

Mode	Frequency (MHz)	99%Bandwidth (MHz)	26 dB Bandwidth (MHz)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	836.6	4.200	4.720
Downlink (869-894 MHz)	881.6	4.180	4.700
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1880	4.2200	4.7400
Downlink (1930-1990 MHz)	1960	4.2000	4.7400

Please refer to the following plots.

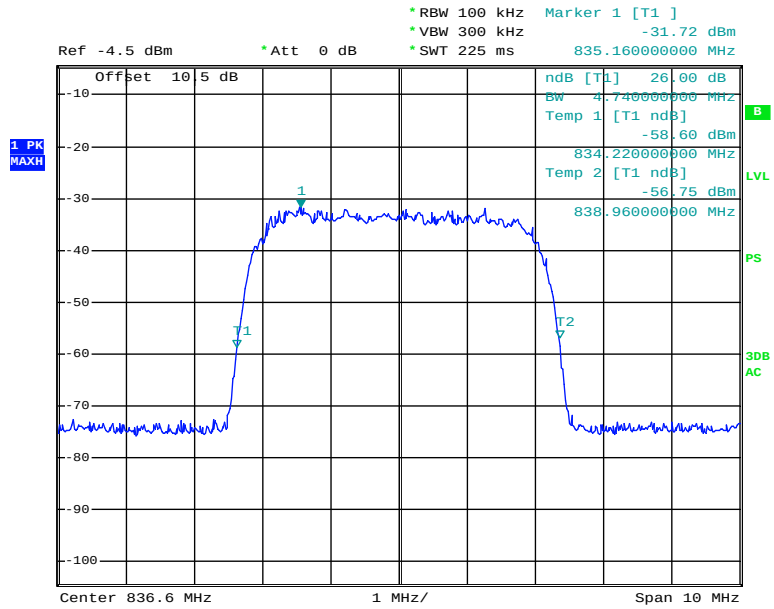
Cellular Band (Part 22H)

Input Signal, Uplink, 99% Bandwidth, Middle Channel



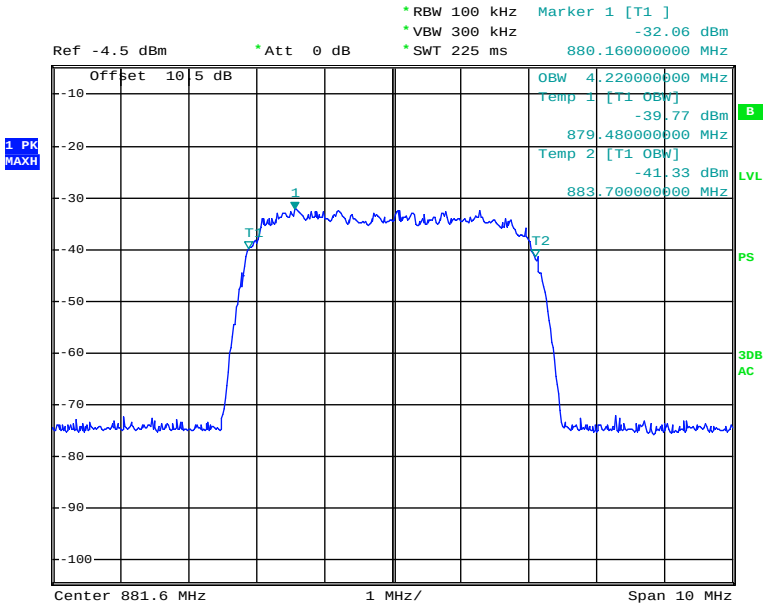
Date: 20.JAN.2012 09:25:35

Input Signal, Uplink, 26 dB Bandwidth, Middle Channel



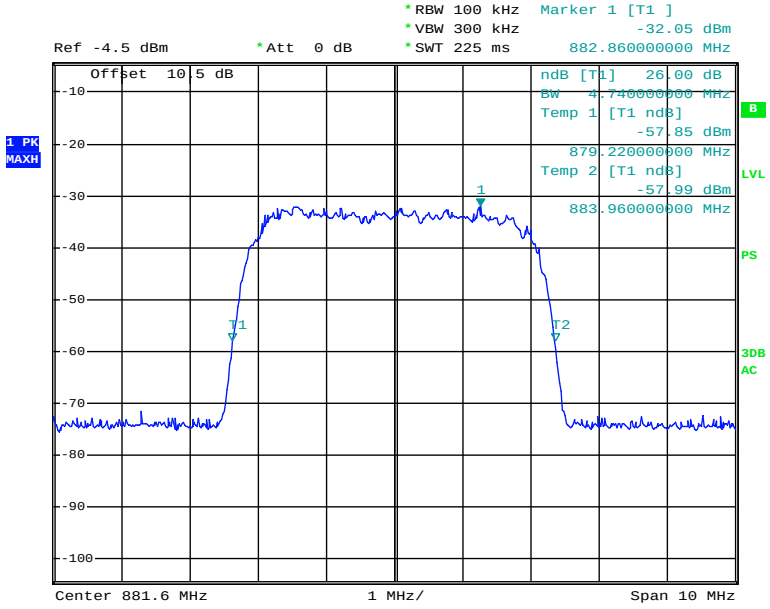
Date: 20.JAN.2012 09:25:48

Input Signal, Downlink, 99% Bandwidth, Middle Channel



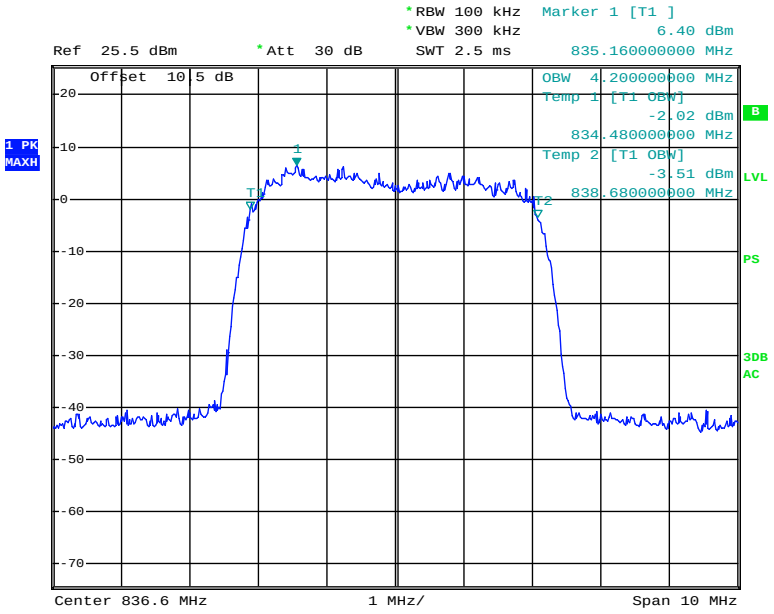
Date: 20.JAN.2012 09:26:47

Input Signal, Downlink, 26 dB Bandwidth, Middle Channel



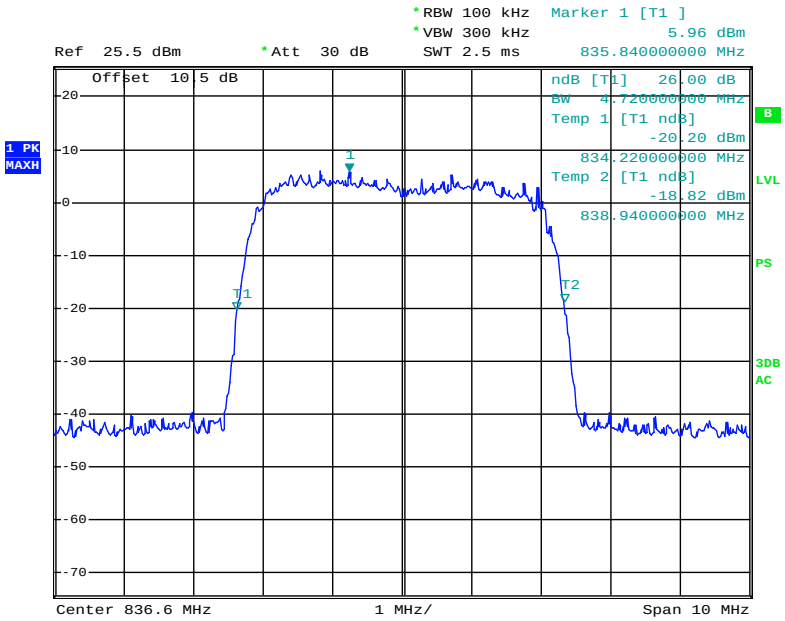
Date: 20.JAN.2012 09:26:34

Output Signal, Uplink, 99% Bandwidth, Middle Channel



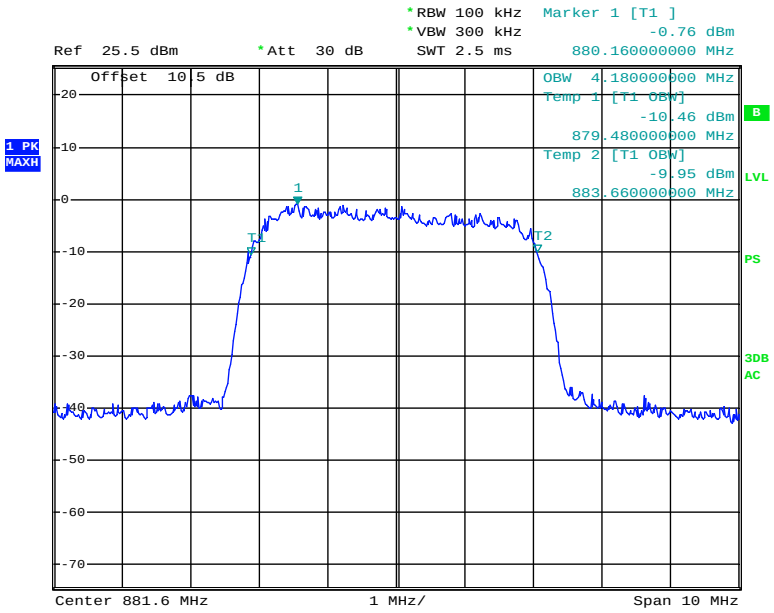
Date: 20.JAN.2012 09:59:17

Output Signal, Uplink, 26 dB Bandwidth, Middle Channel



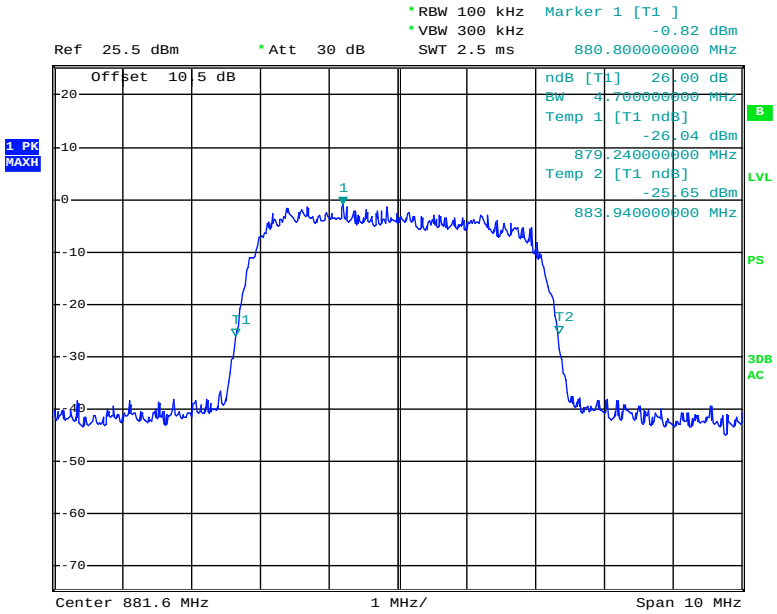
Date: 20.JAN.2012 09:58:59

Output Signal, Downlink, 99% Bandwidth, Middle Channel



Date: 20.JAN.2012 09:54:24

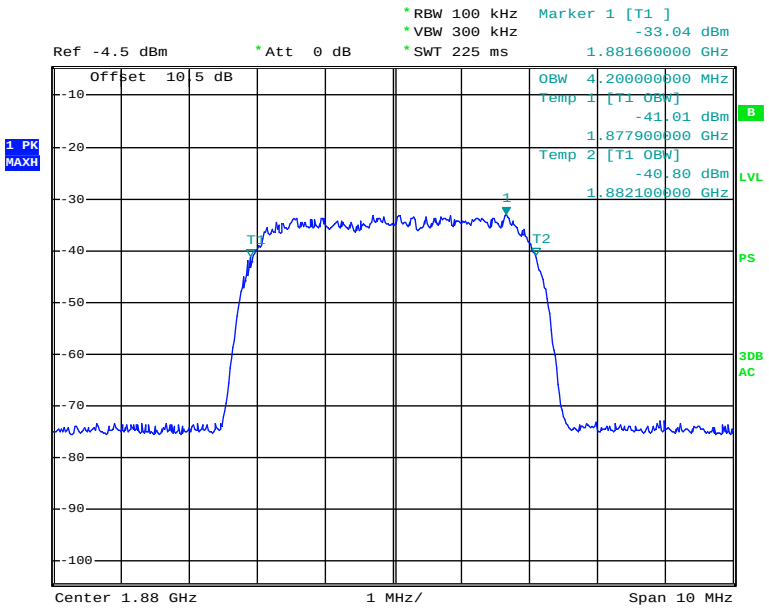
Output Signal, Downlink, 26 dB Bandwidth, Middle Channel



Date: 20.JAN.2012 09:54:37

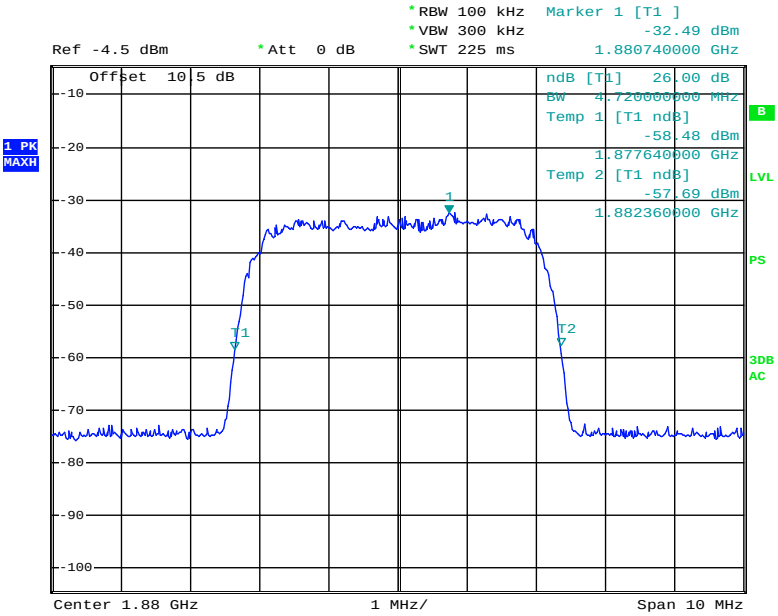
PCS Band (Part 24E)

Input Signal, Uplink, 99% Bandwidth, Middle Channel



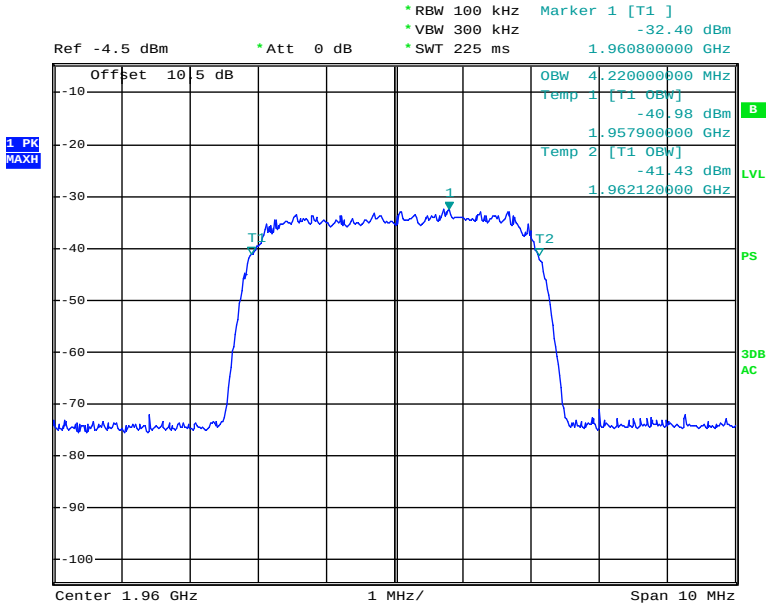
Date: 20.JAN.2012 09:27:58

Input Signal, Uplink, 26 dB Bandwidth, Middle Channel



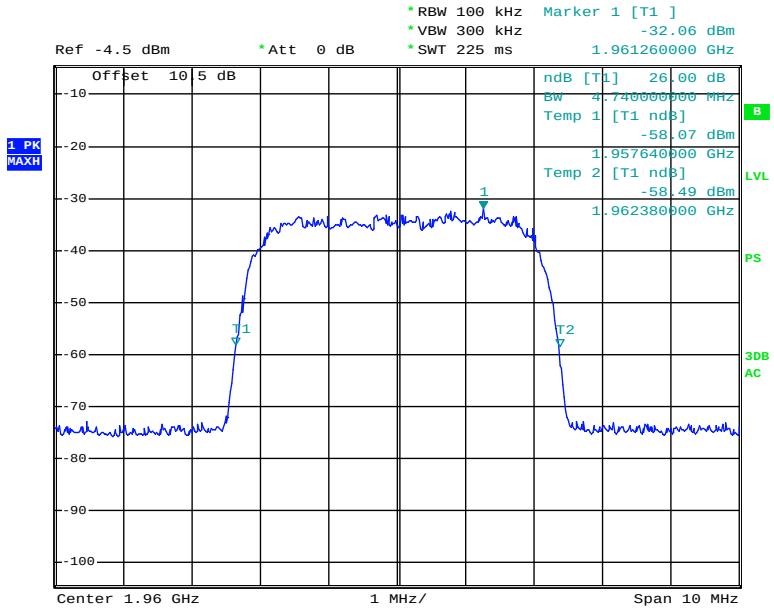
Date: 20.JAN.2012 09:27:43

Input Signal, Downlink, 99% Bandwidth, Middle Channel



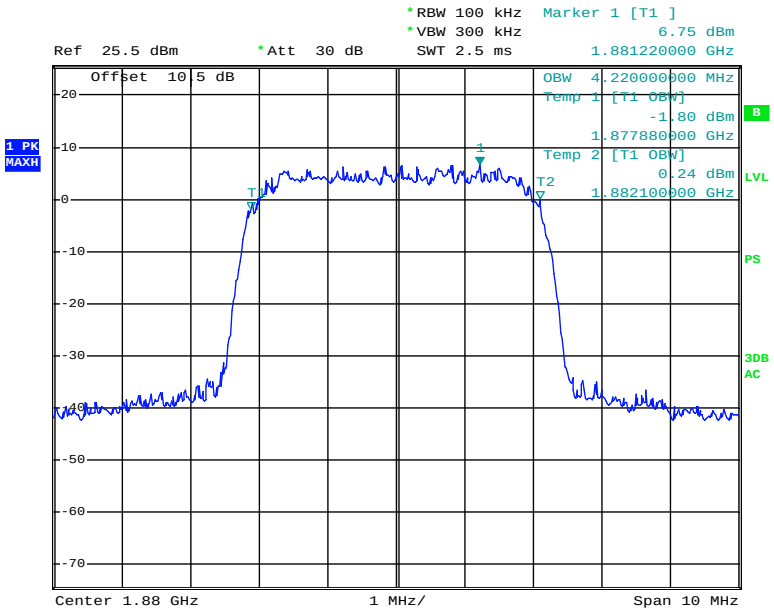
Date: 20.JAN.2012 09:27:09

Input Signal, Downlink, 26 dB Bandwidth, Middle Channel



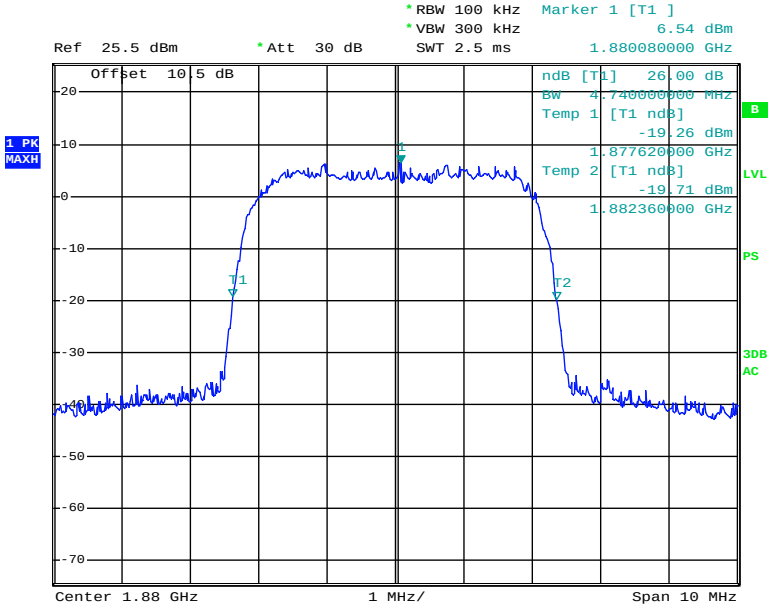
Date: 20.JAN.2012 09:27:22

Output Signal, Uplink, 99% Bandwidth, Middle Channel



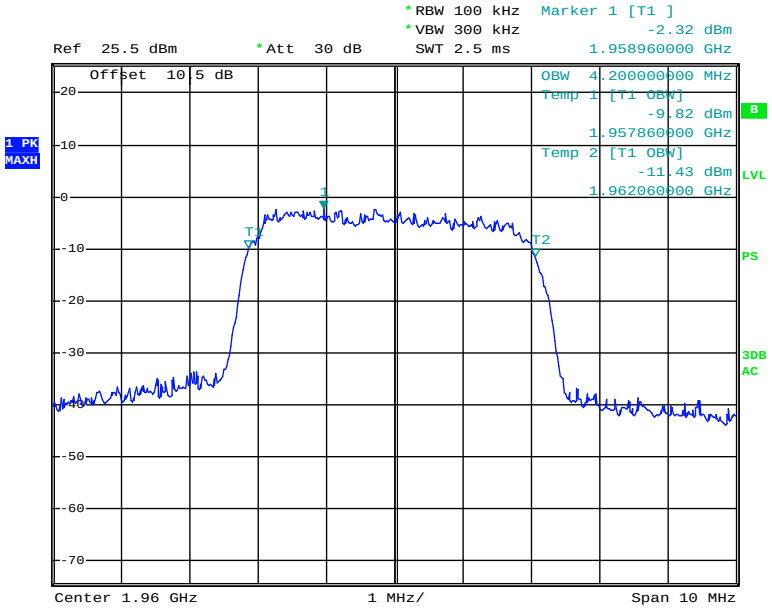
Date: 20.JAN.2012 09:45:57

Output Signal, Uplink, 26 dB Bandwidth, Middle Channel



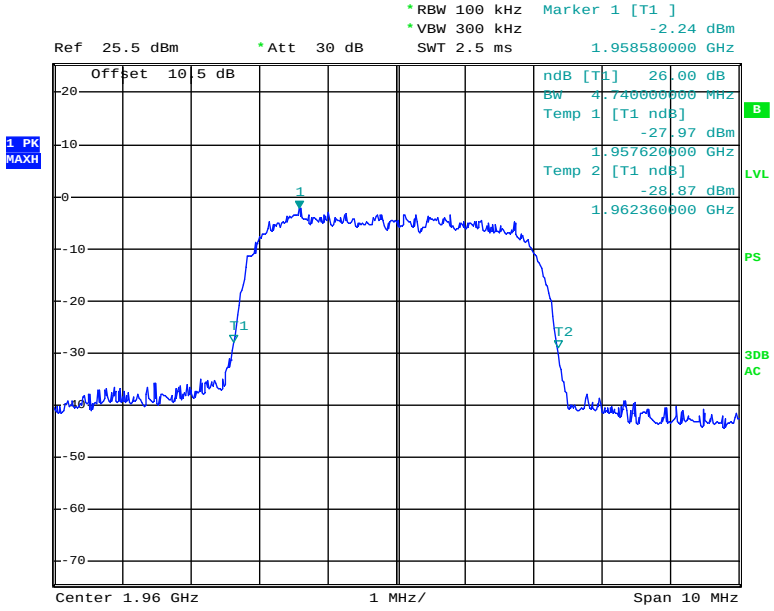
Date: 20.JAN.2012 09:46:17

Output Signal, Downlink, 99% Bandwidth, Middle Channel



Date: 20.JAN.2012 09:57:15

Output Signal, Downlink, 26 dB Bandwidth, Middle Channel



Date: 20.JAN.2012 09:57:35

FCC §2.1051, §22.917(a) &§24.238(a) - SPURIOUS EMISSIONS AT ANTENNA TERMINALS

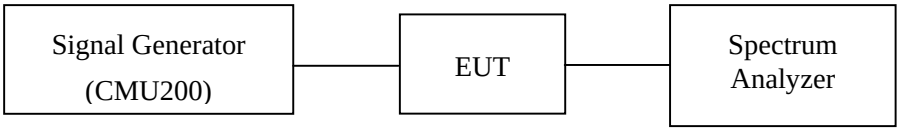
Applicable Standards

FCC §2.1051, §22.917(a) and§24.238(a).

The spectrum was to be investigated to the tenth harmonics of the highest fundamental frequency as specified in § 2.1051.

Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 100 kHz. Sufficient scans were taken to show any out of band emissions up to 10th harmonic.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100224	2011-10-28	2012-10-27
Rohde & Schwarz	Signal Analyzer	FSIQ 26	609358	2011-07-08	2012-07-07

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0kPa

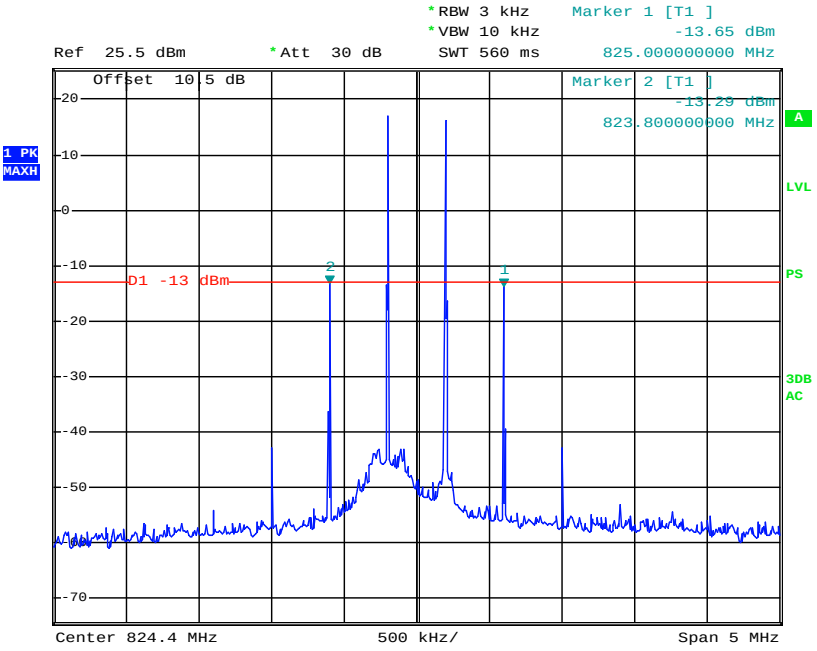
The testing was performed by Henry Ding from 2012-01-03 to 2012-02-22.

Please refer to the following plots.

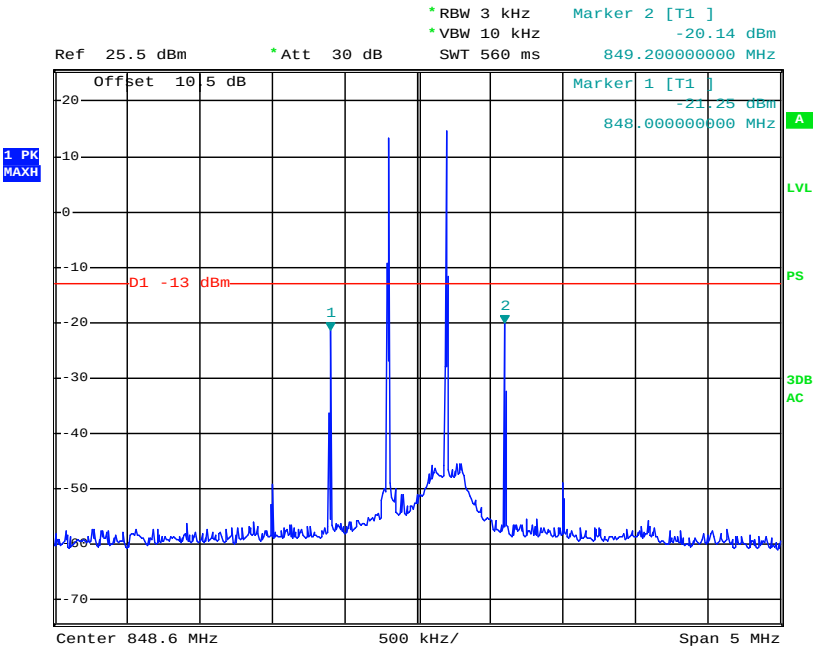
GSM

Cellular Band (Part 22H)

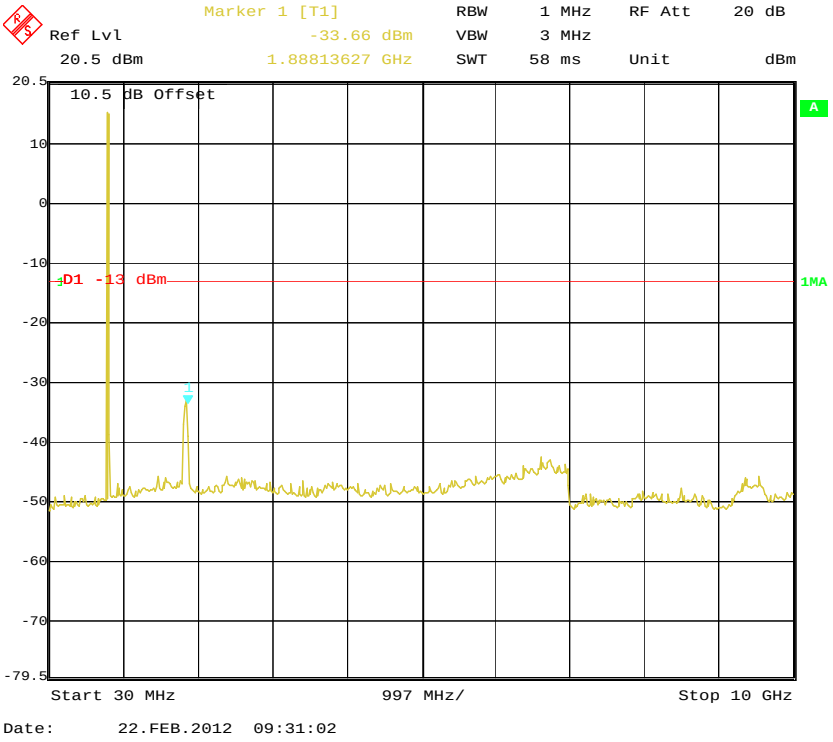
Uplink, Inter-modulation, Low-band edge



Uplink, Inter-modulation, High-band edge



Uplink, Spurious Emissions at Antenna Terminal, Low Channel



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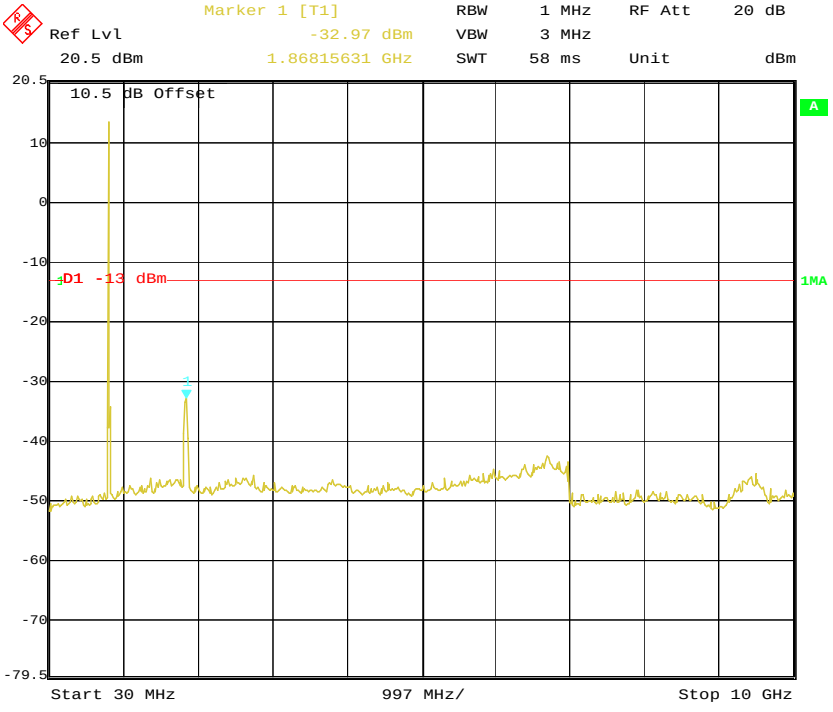
Uplink, Spurious Emissions at Antenna Terminal, Middle Channel



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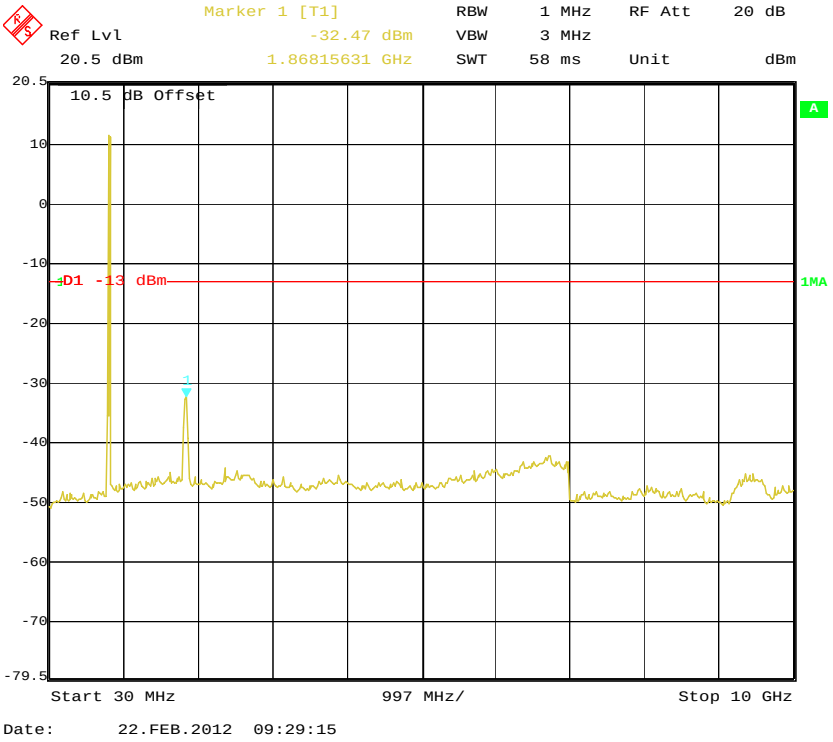
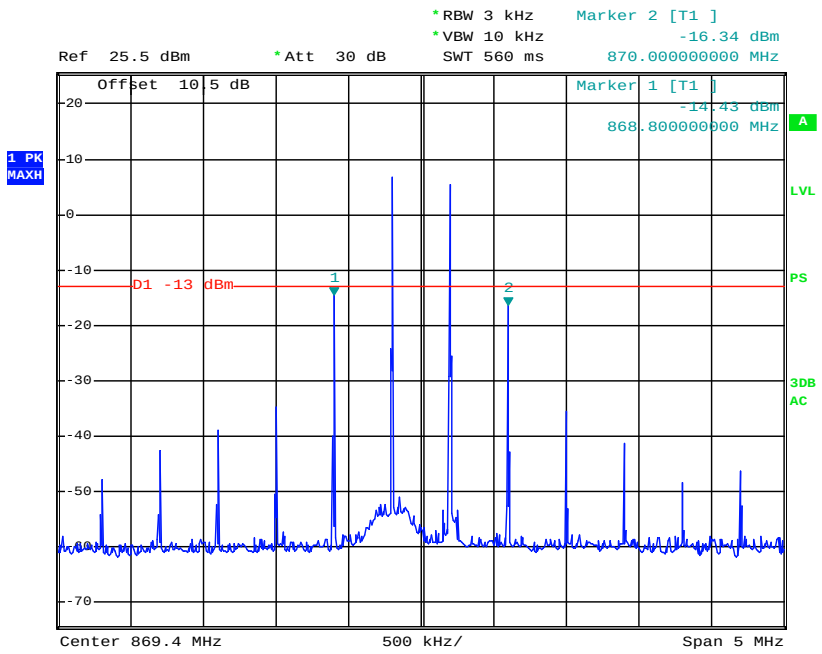
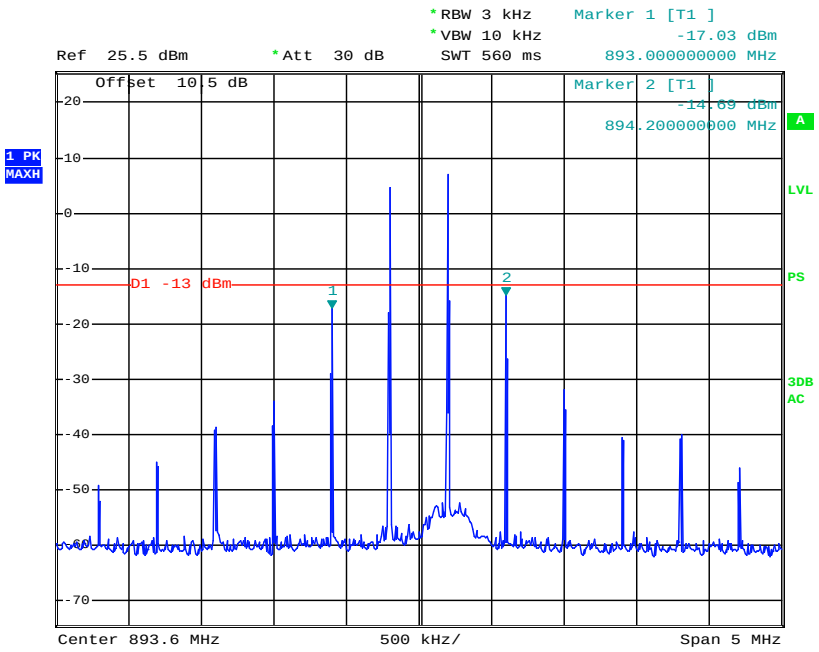
Uplink, Spurious Emissions at Antenna Terminal, High Channel



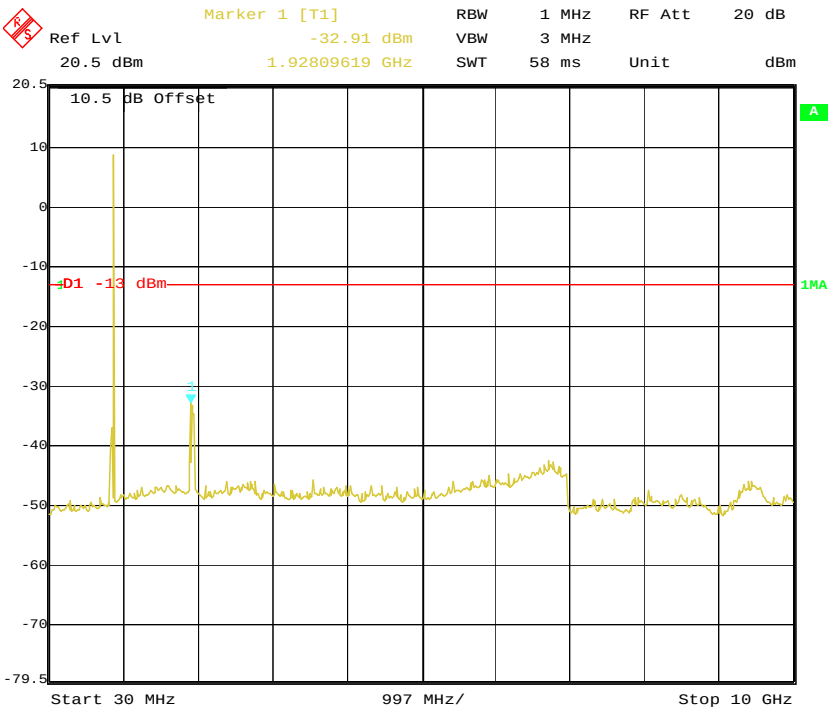
Downlink, Inter-modulation, Low-band edge



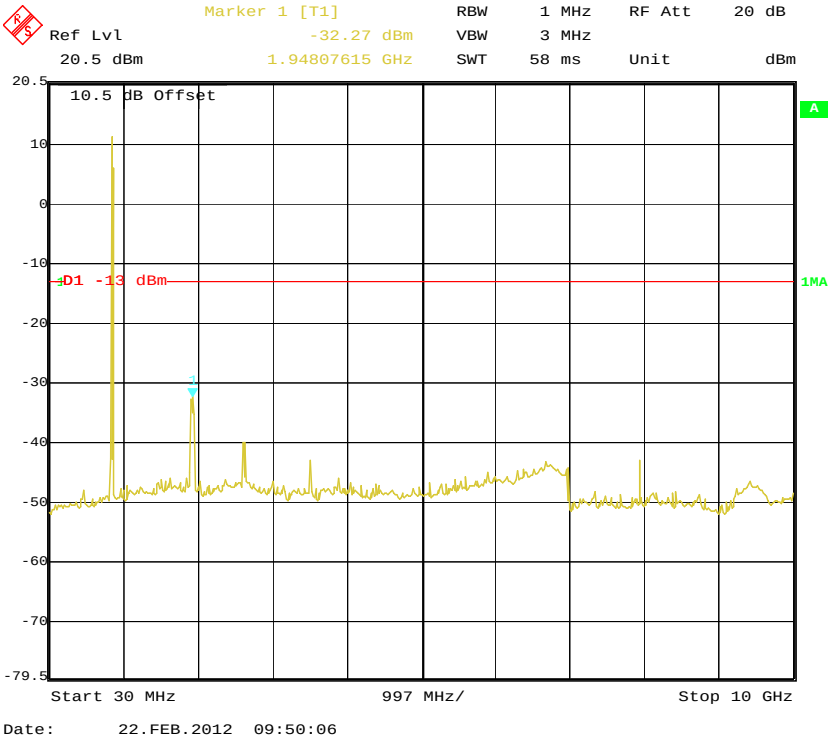
Downlink, Inter-modulation, High-band edge



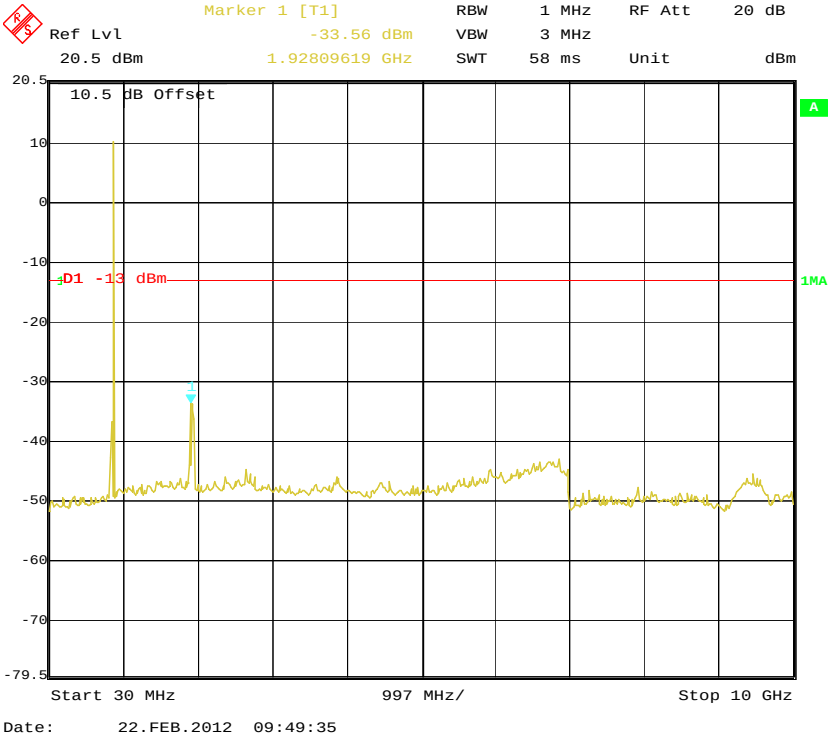
Downlink, Spurious Emissions at Antenna Terminal, Low Channel



Downlink, Spurious Emissions at Antenna Terminal, Middle Channel

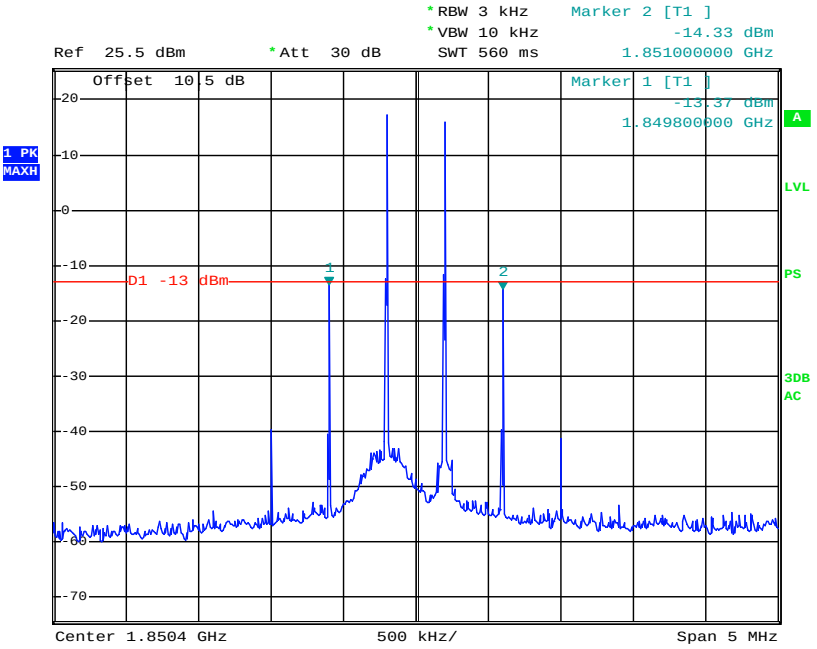


Downlink, Spurious Emissions at Antenna Terminal, High Channel

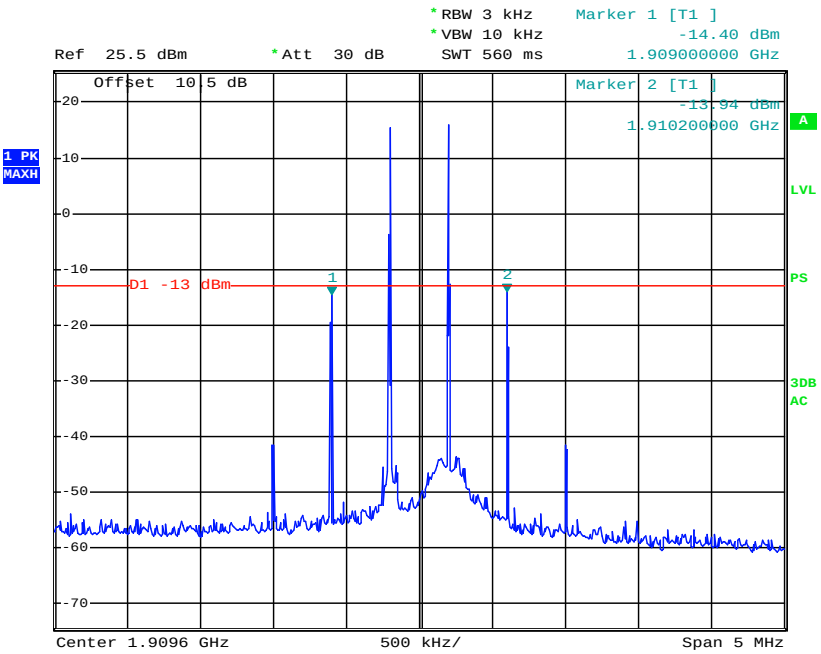


PCS Band (Part 24E)

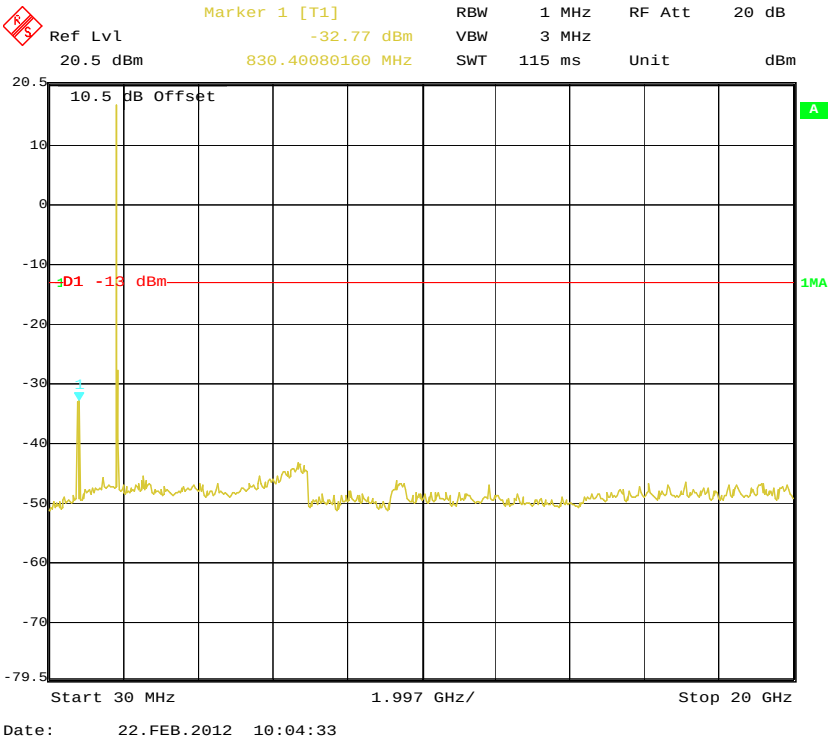
Uplink, Inter-modulation, Low-band edge



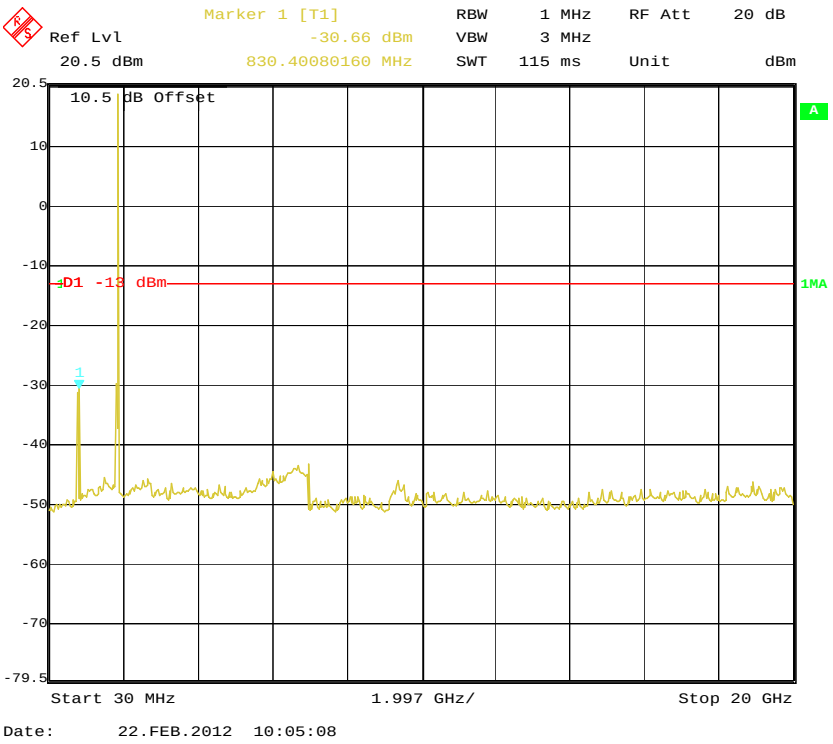
Uplink, Inter-modulation, High -band edge



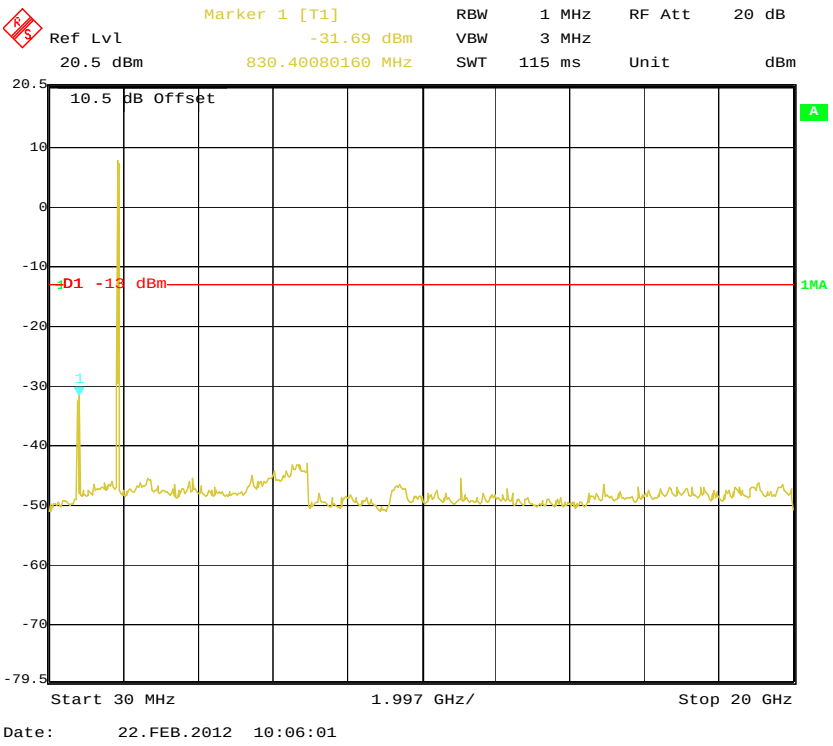
Uplink, Spurious Emissions at Antenna Terminal, Low Channel



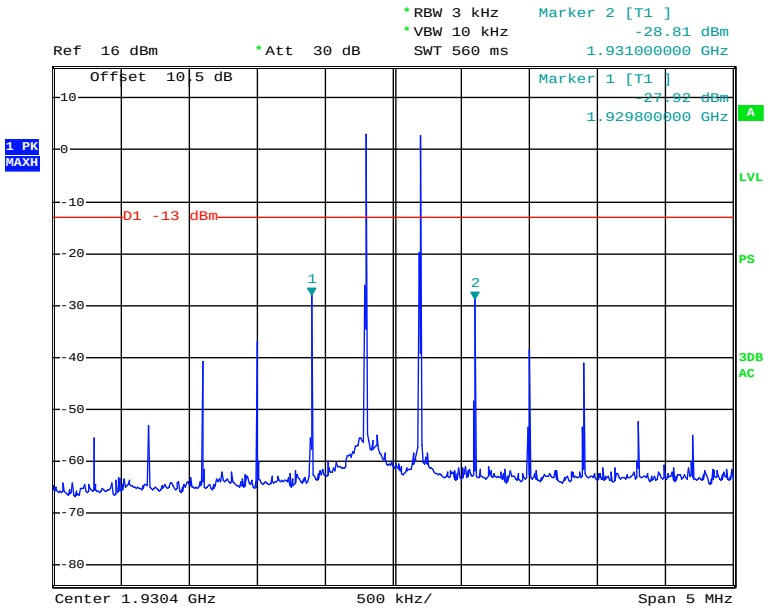
Uplink, Spurious Emissions at Antenna Terminal, Middle Channel



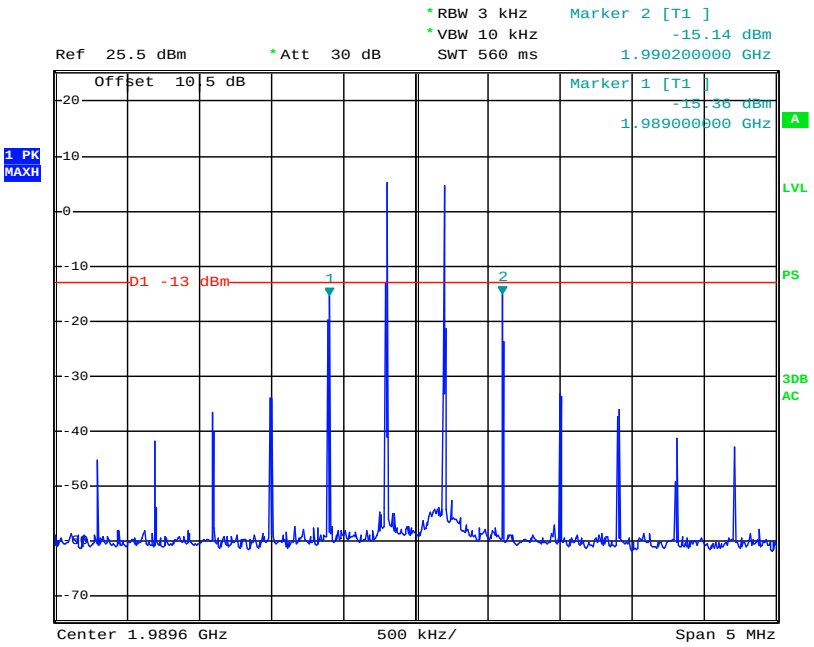
Uplink, Spurious Emissions at Antenna Terminal, High Channel



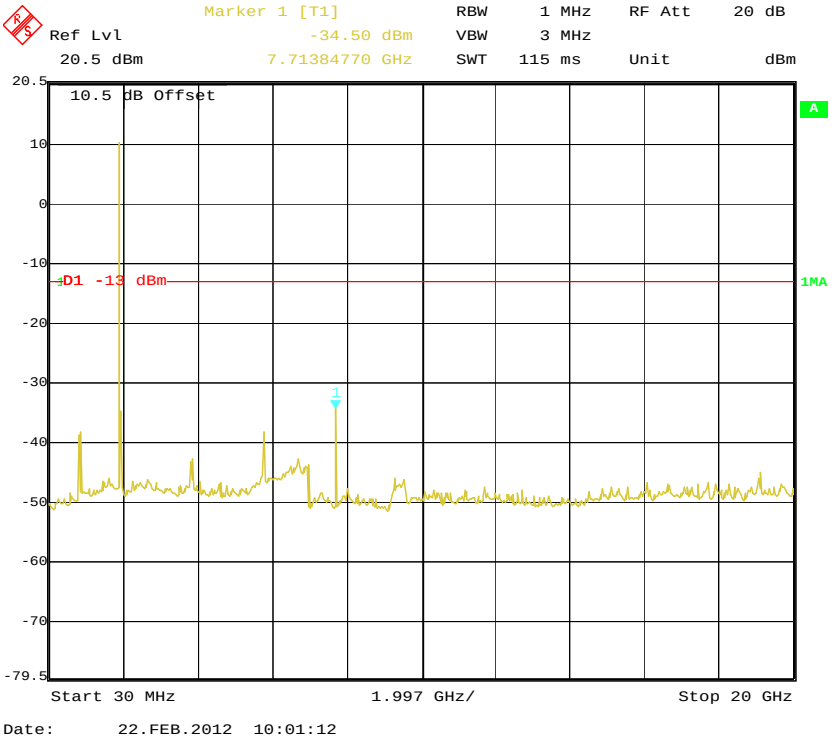
Downlink, Inter-modulation, Low-band edge



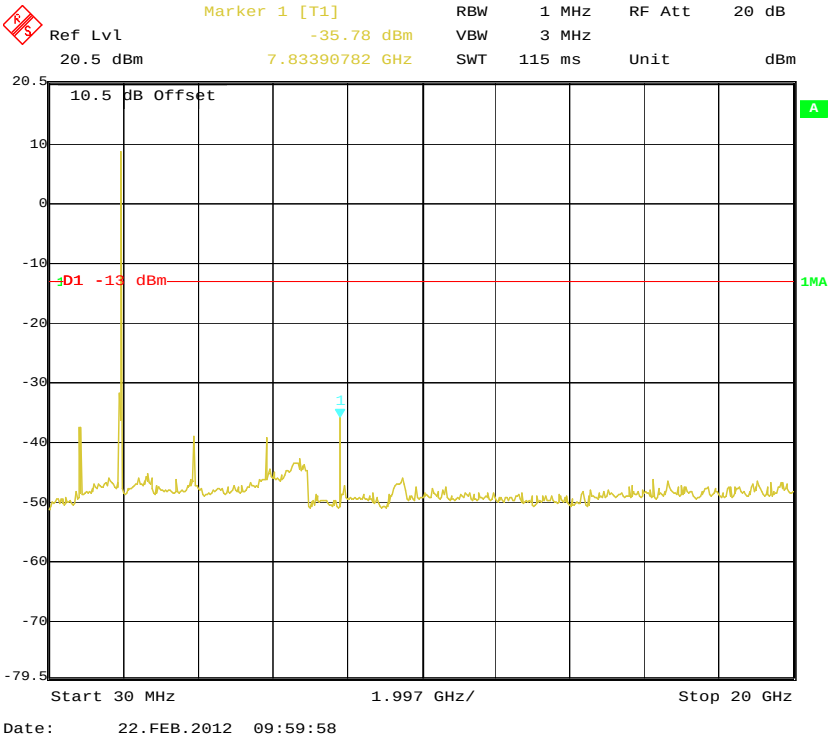
Downlink, Inter-modulation, High-band edge



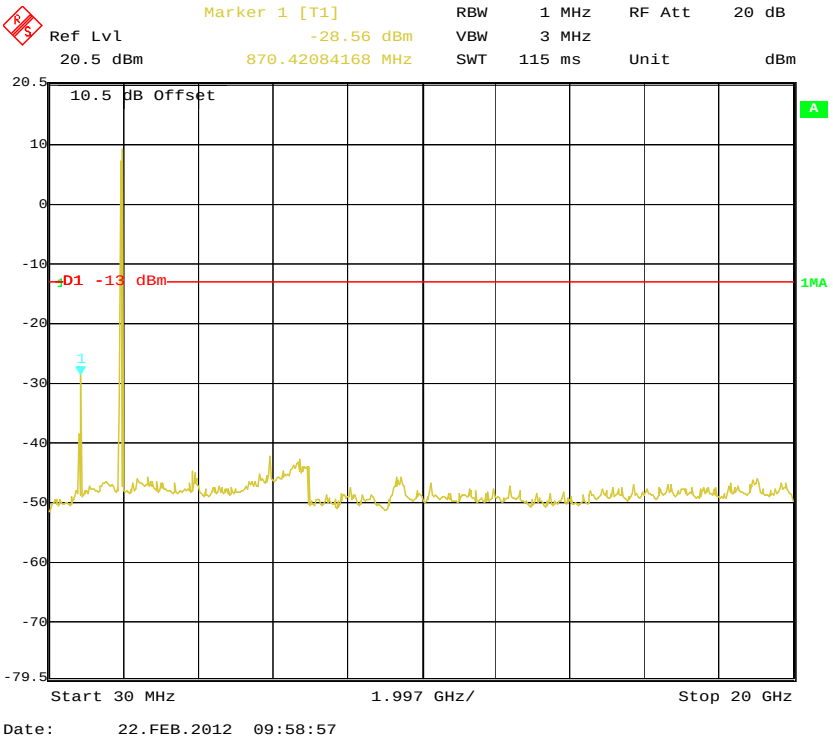
Downlink, Spurious Emissions at Antenna Terminal, Low Channel



Downlink, Spurious Emissions at Antenna Terminal, Middle Channel



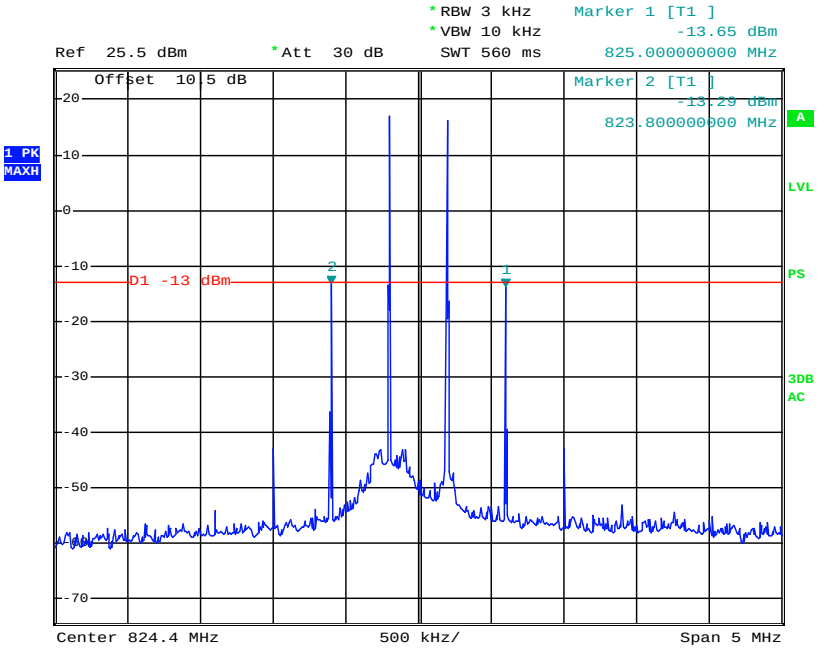
Downlink, Spurious Emissions at Antenna Terminal, High Channel



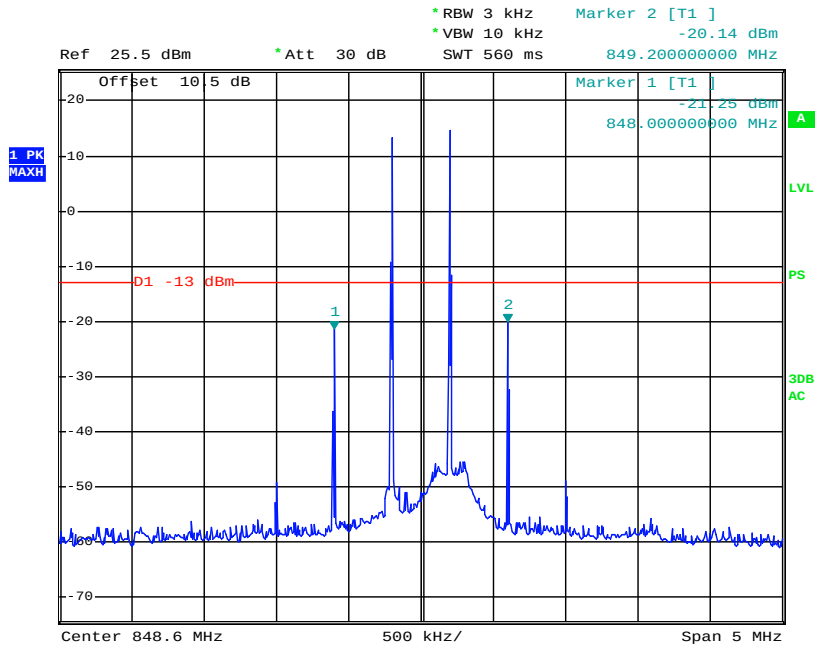
EDGE

Cellular Band (Part 22H)

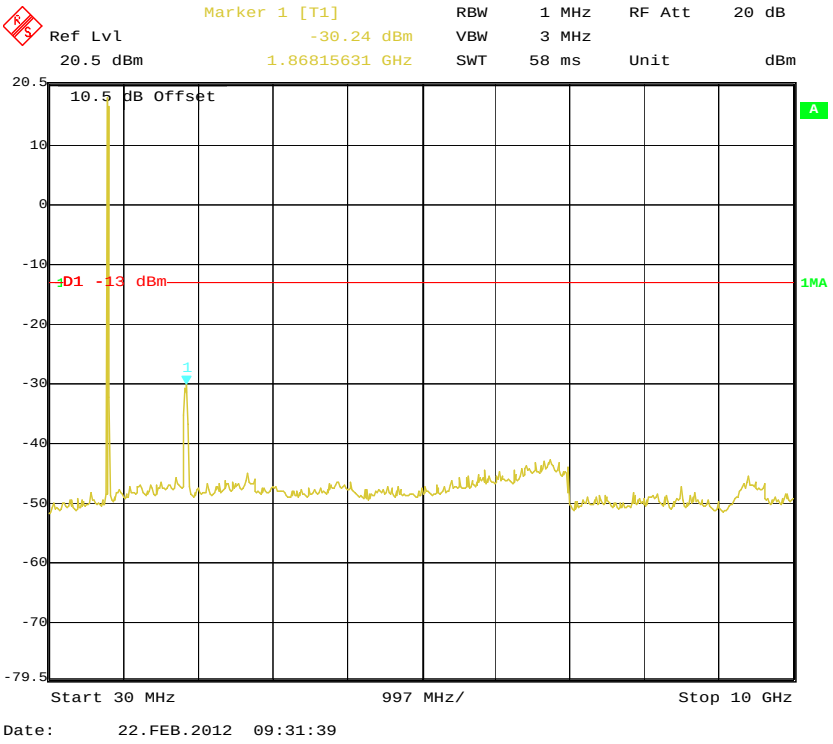
Uplink, Inter-modulation, Low-band edge



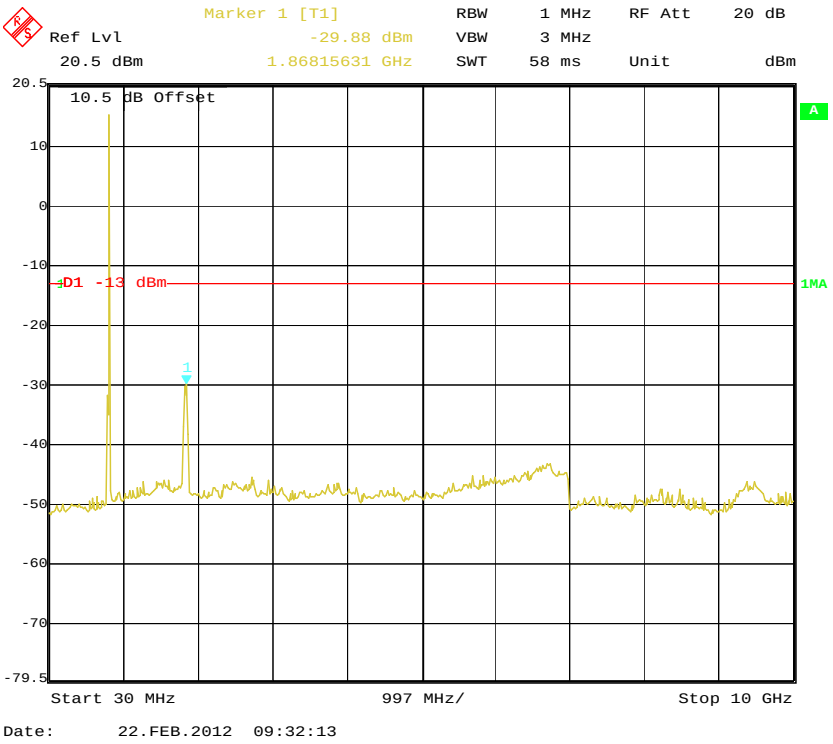
Uplink, Inter-modulation, High-band edge



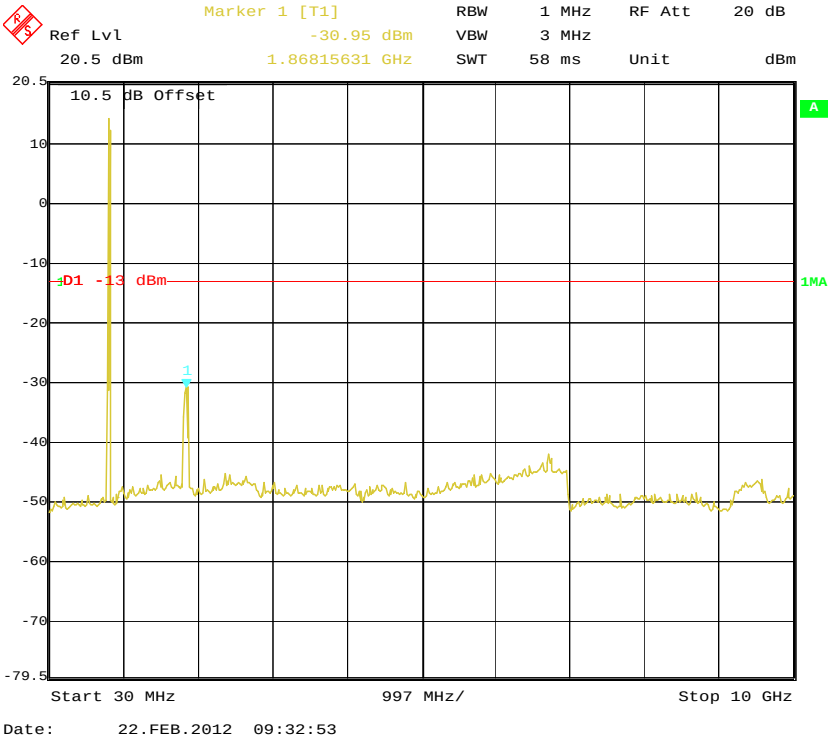
Uplink, Spurious Emissions at Antenna Terminal, Low Channel



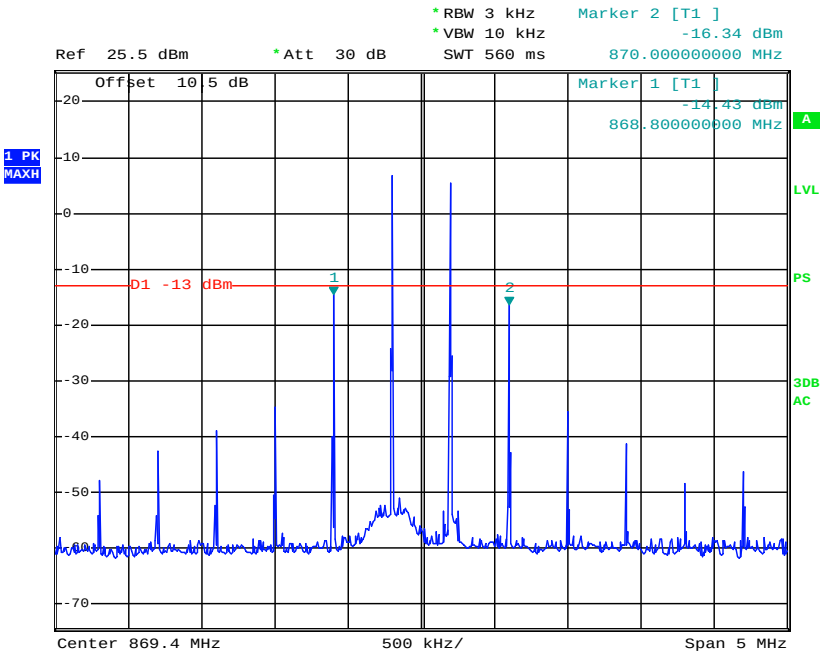
Uplink, Spurious Emissions at Antenna Terminal, Middle Channel



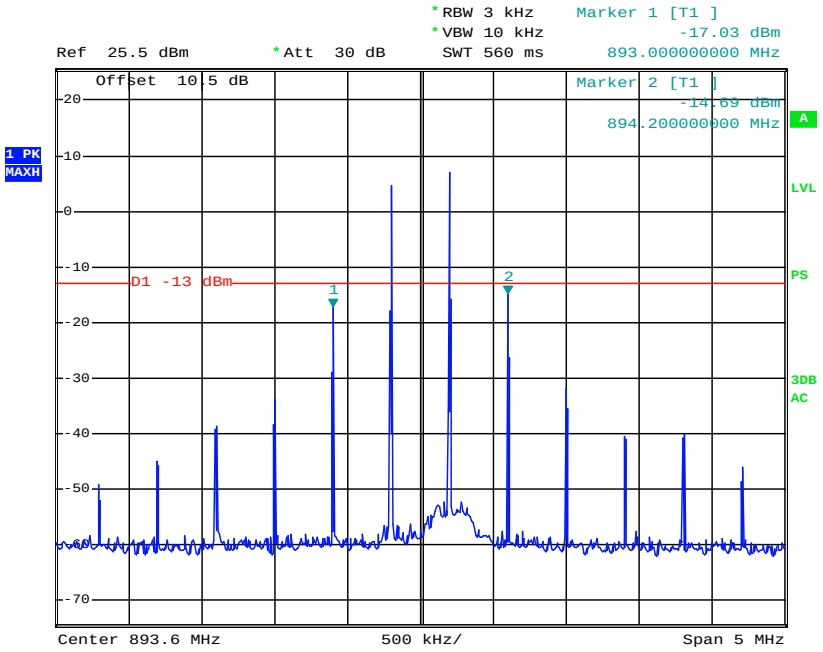
Uplink, Spurious Emissions at Antenna Terminal, High Channel



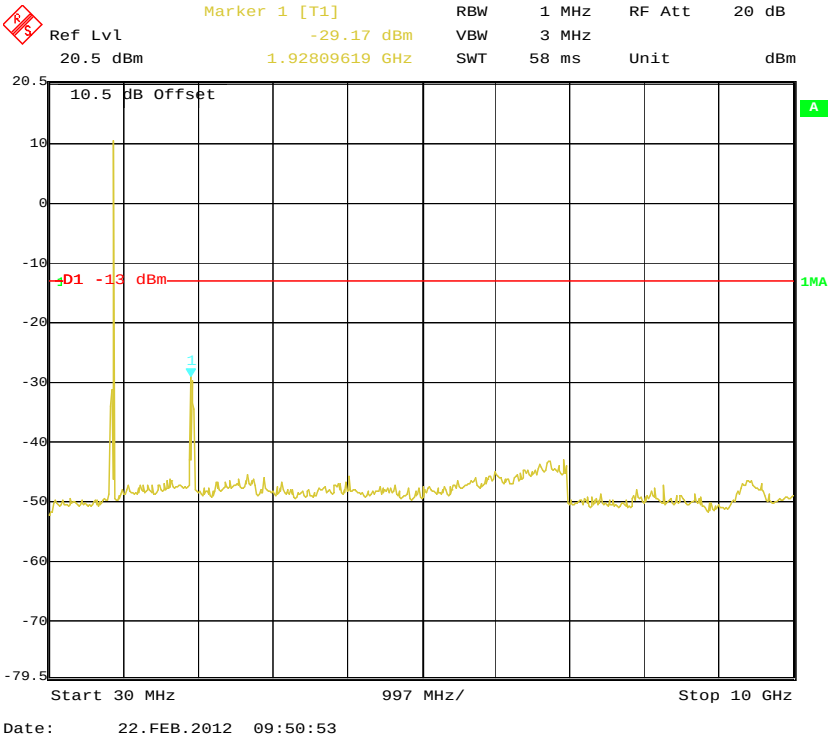
Downlink, Inter-modulation, Low-band edge



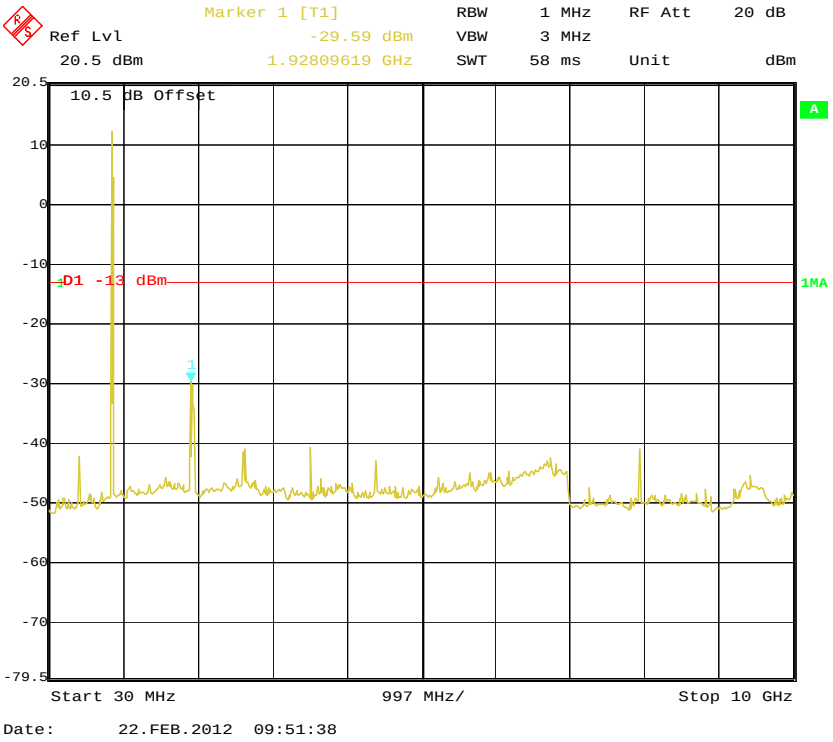
Downlink, Inter-modulation, High-band edge



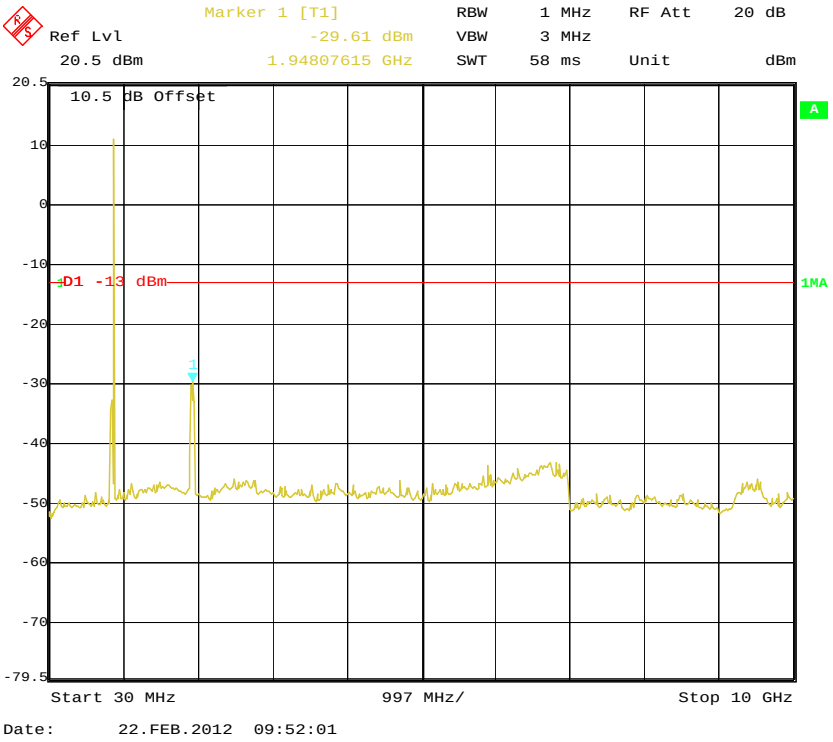
Downlink, Spurious Emissions at Antenna Terminal, Low Channel



Downlink, Spurious Emissions at Antenna Terminal, Middle Channel

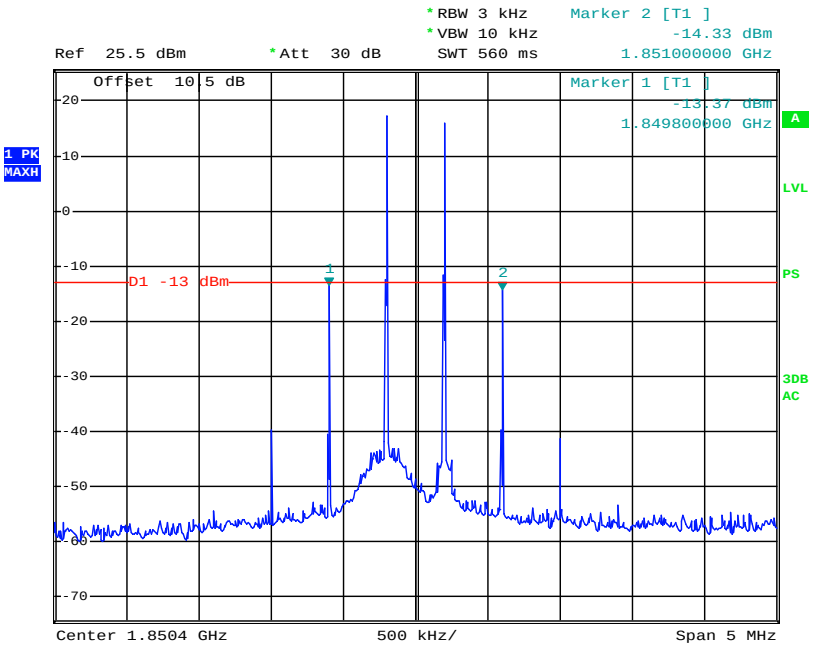


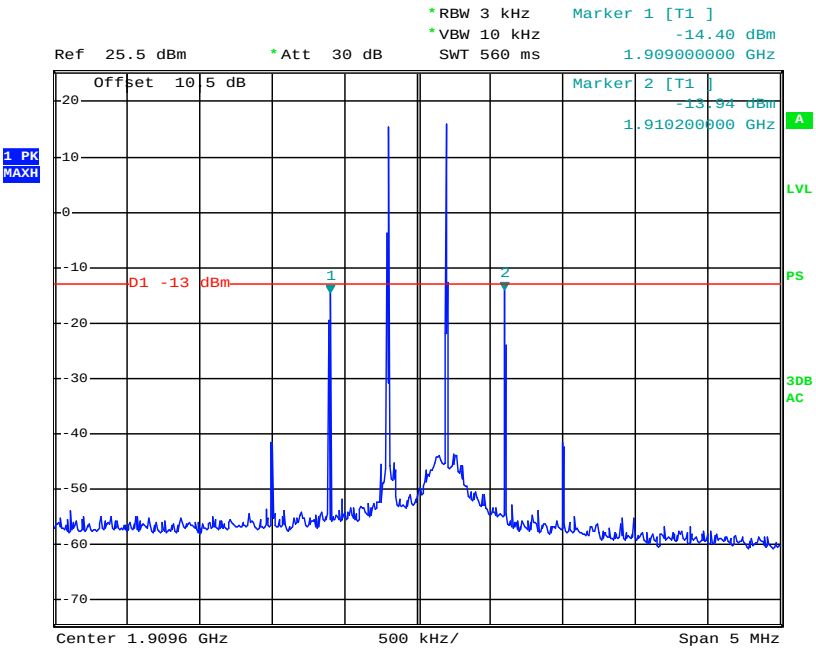
Downlink, Spurious Emissions at Antenna Terminal, High Channel



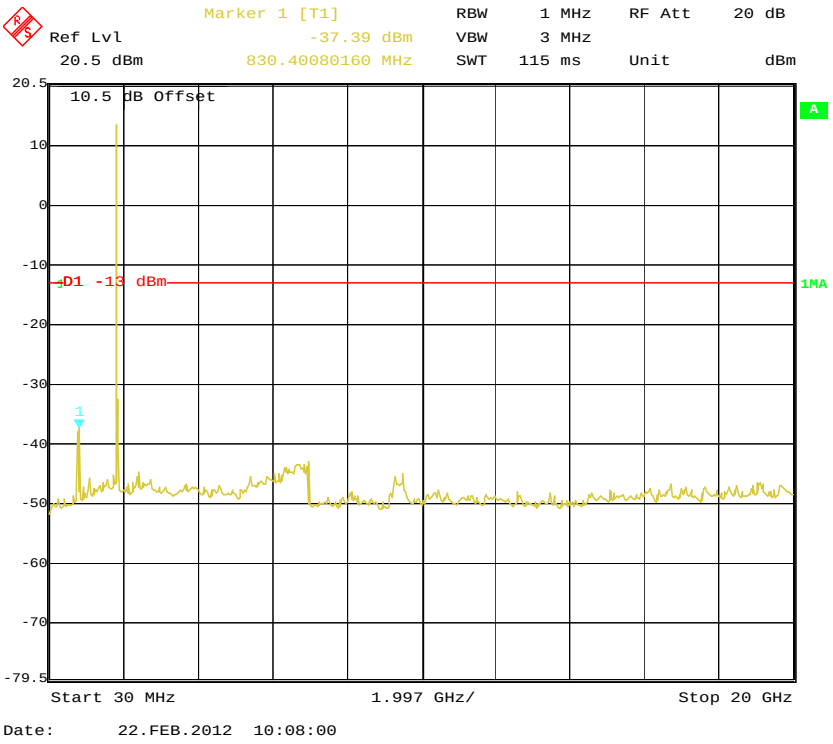
PCS Band (Part 24E)

Uplink, Inter-modulation, Low-band edge

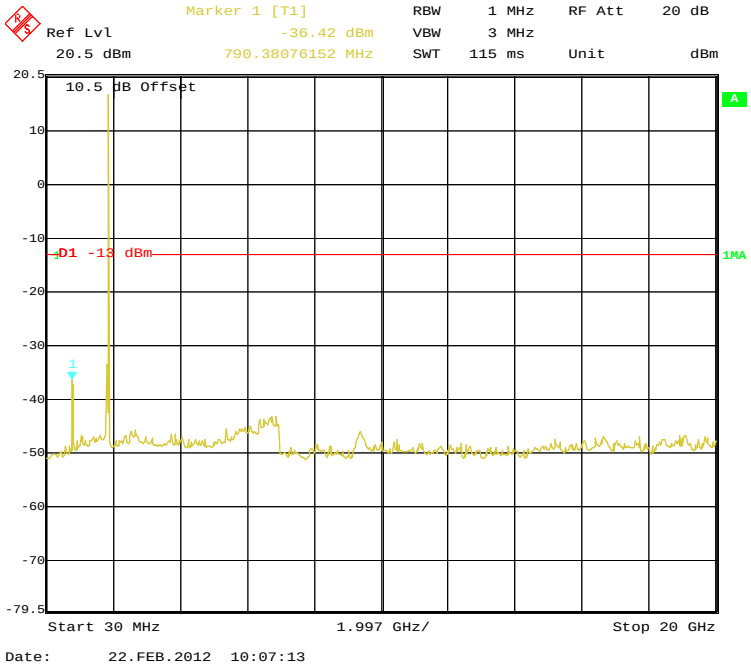




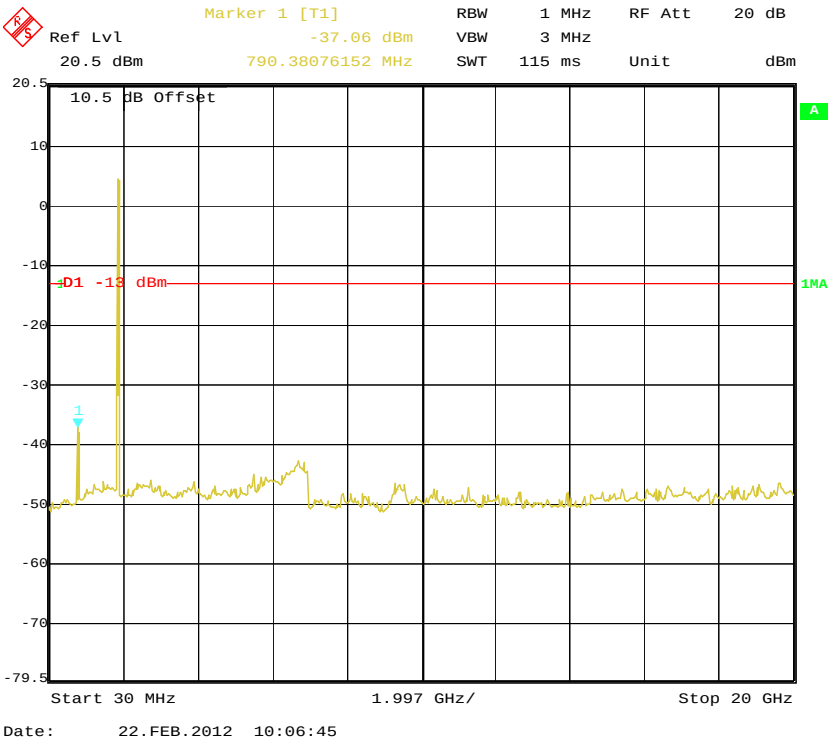
Uplink, Spurious Emissions at Antenna Terminal, Low Channel



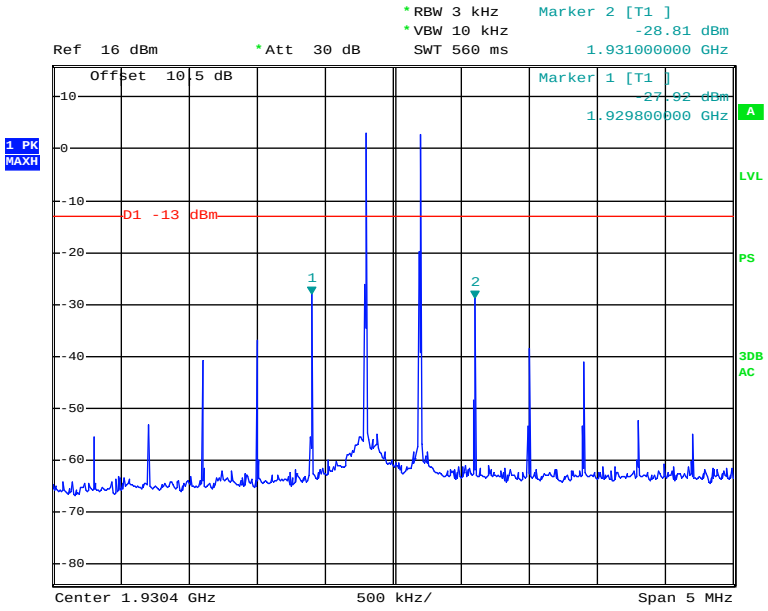
Uplink, Spurious Emissions at Antenna Terminal, Middle Channel



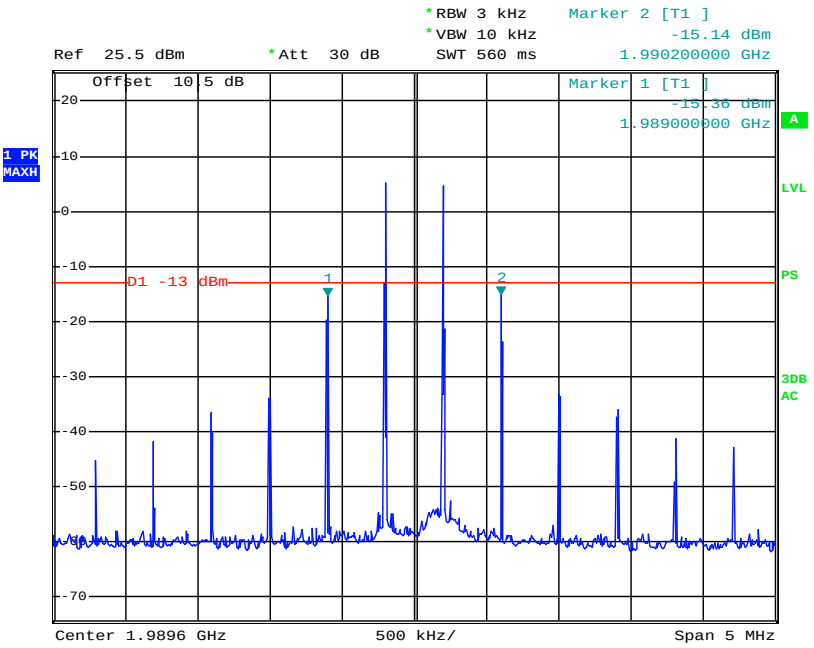
Uplink, Spurious Emissions at Antenna Terminal, High Channel



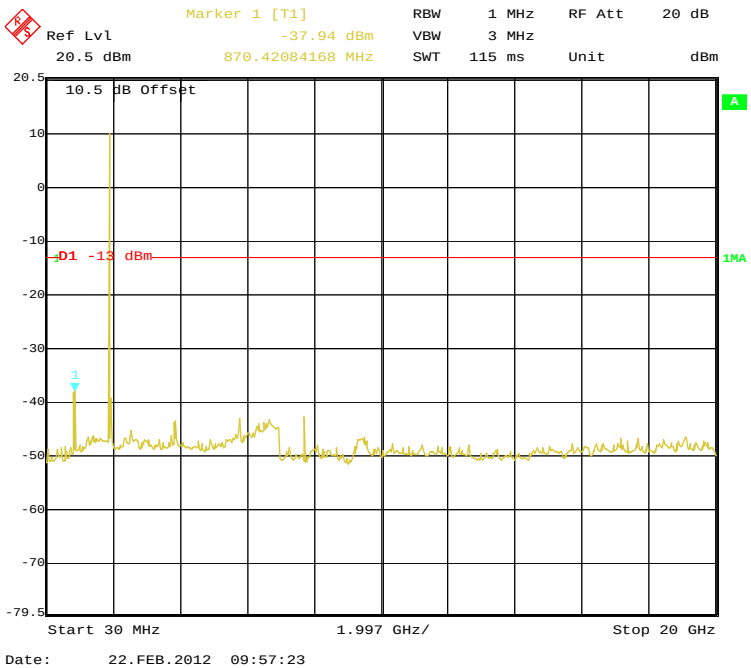
Downlink, Inter-modulation, Low Channel



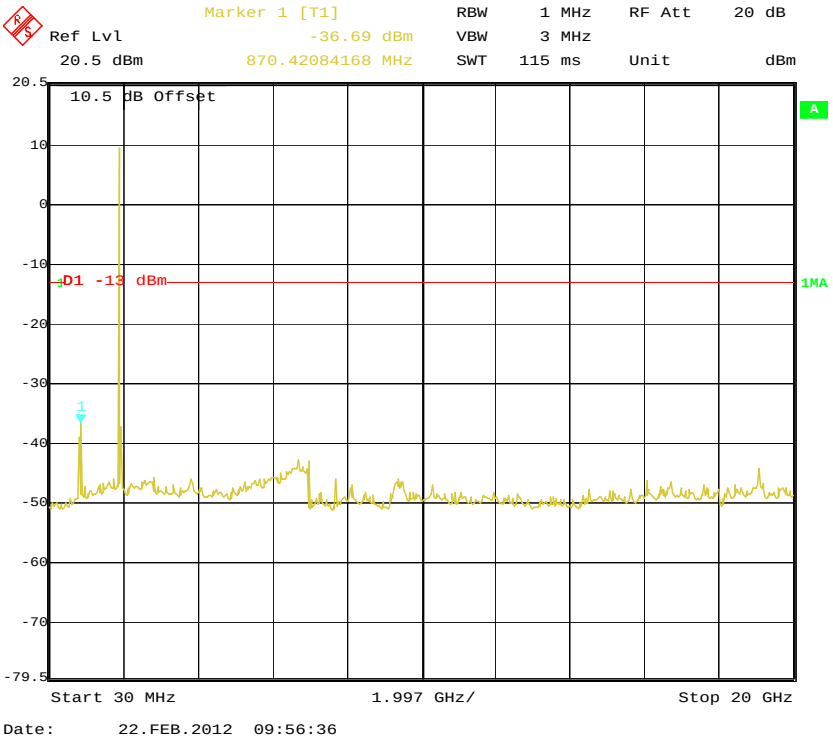
Downlink, Inter-modulation, High Channel



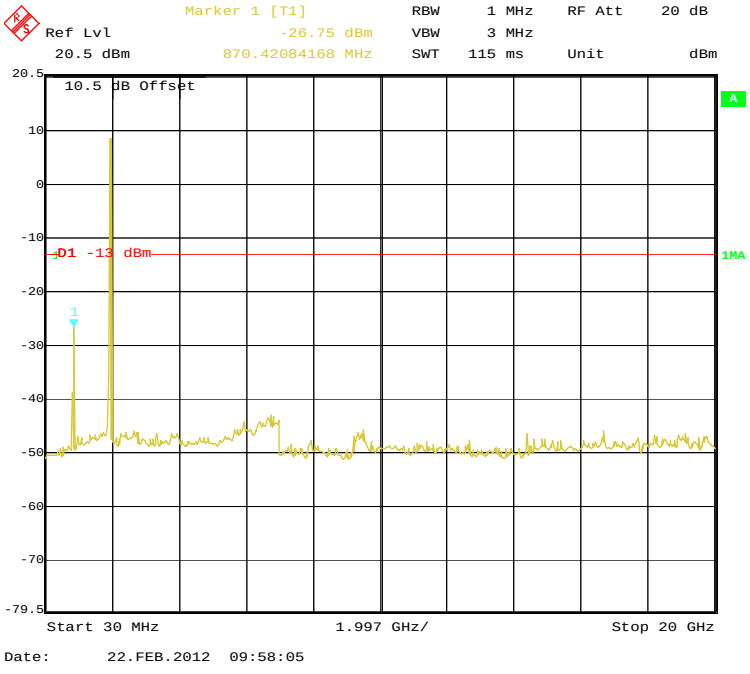
Downlink, Spurious Emissions at Antenna Terminal, Low Channel



Downlink, Spurious Emissions at Antenna Terminal, Middle Channel



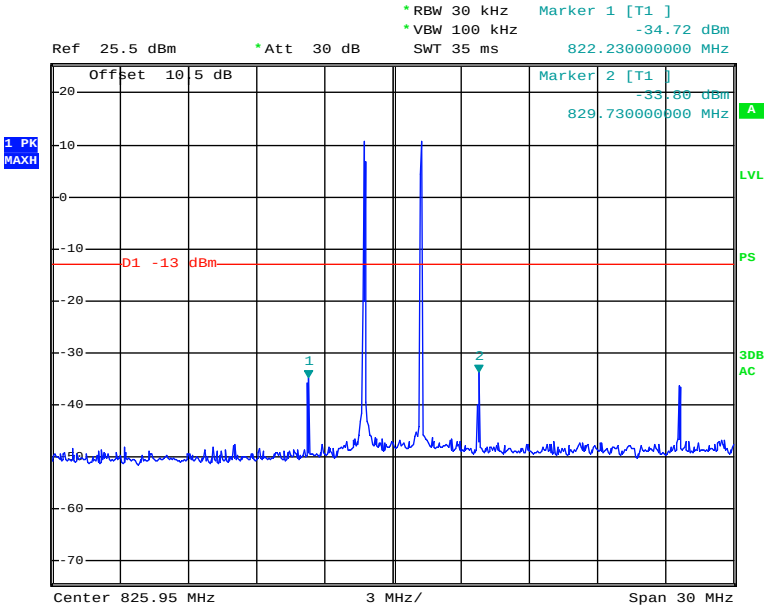
Downlink, Spurious Emissions at Antenna Terminal, High Channel



CDMA

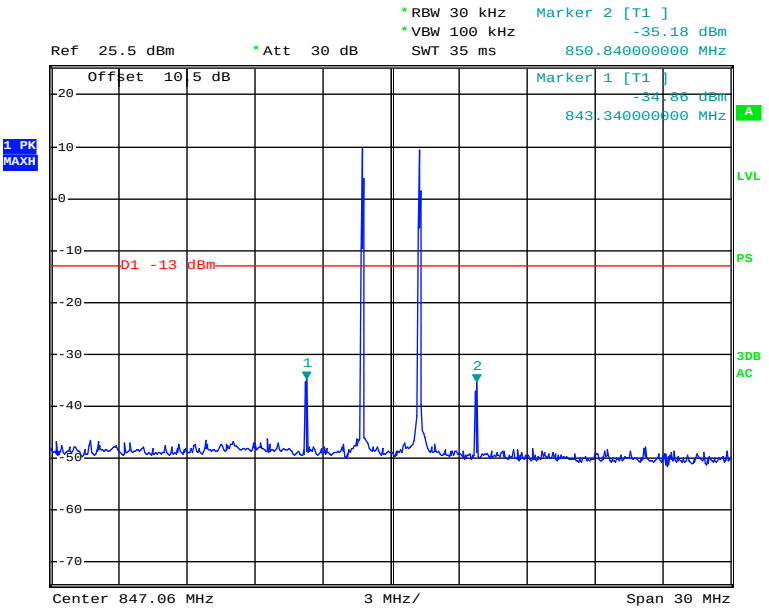
Cellular Band (Part 22H)

Uplink, Inter-modulation, Low-band edge



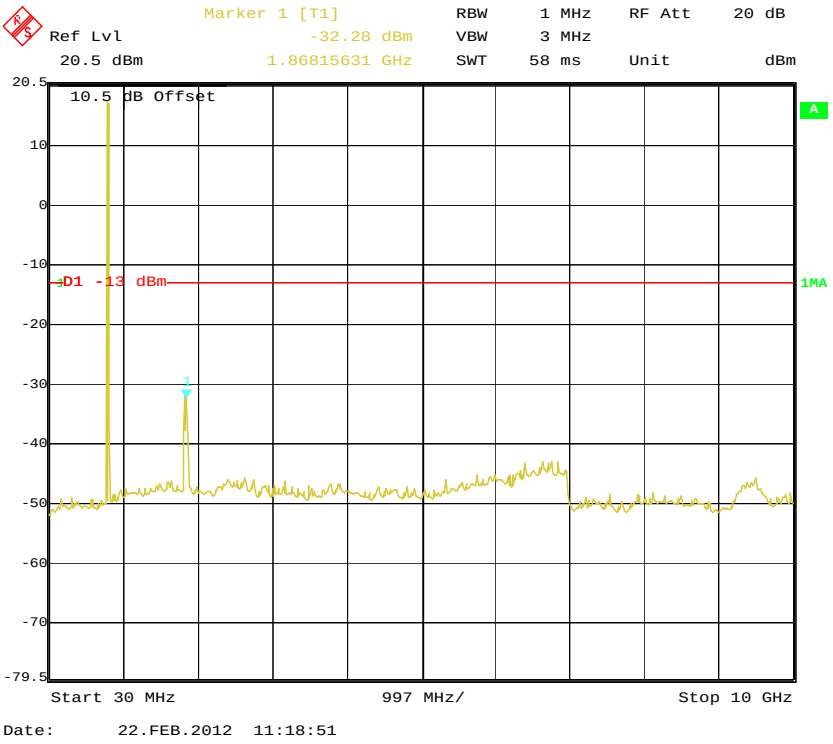
Date: 4.JAN.2012 07:55:22

Uplink, Inter-modulation, High-band edge

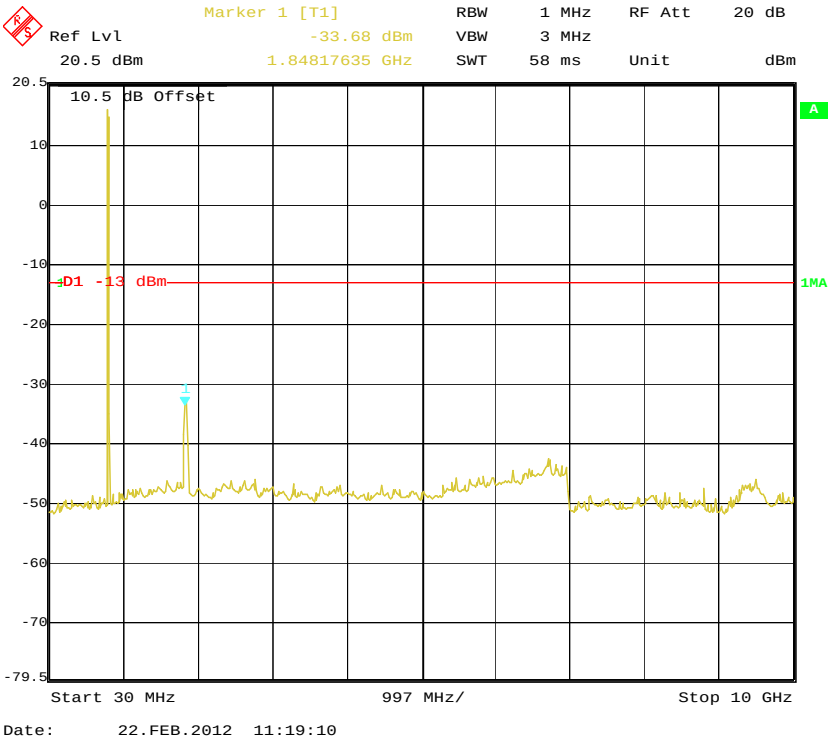


Date: 4.JAN.2012 07:53:17

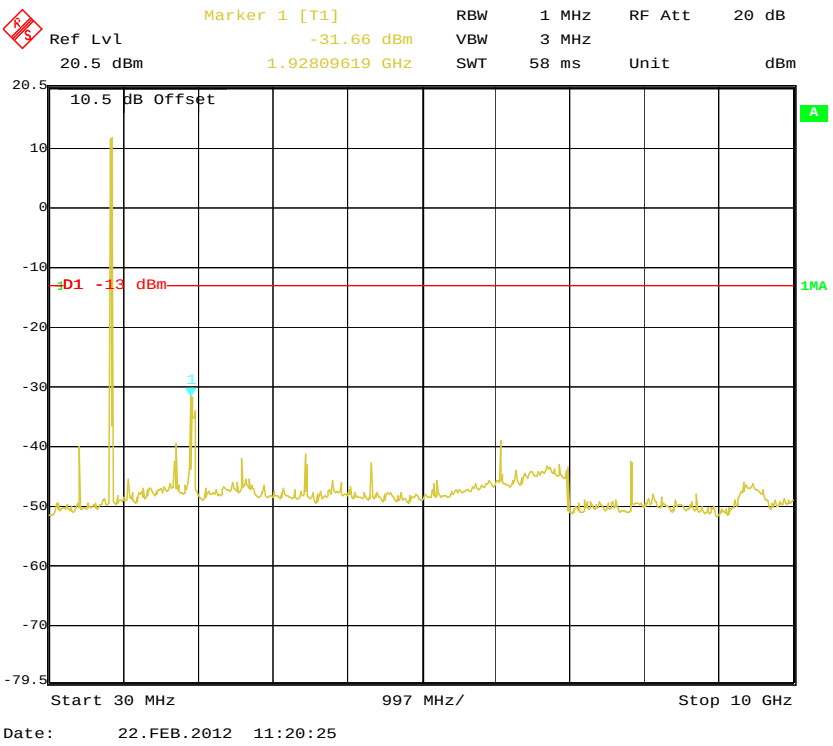
Uplink, Spurious Emissions at Antenna Terminal, Low Channel



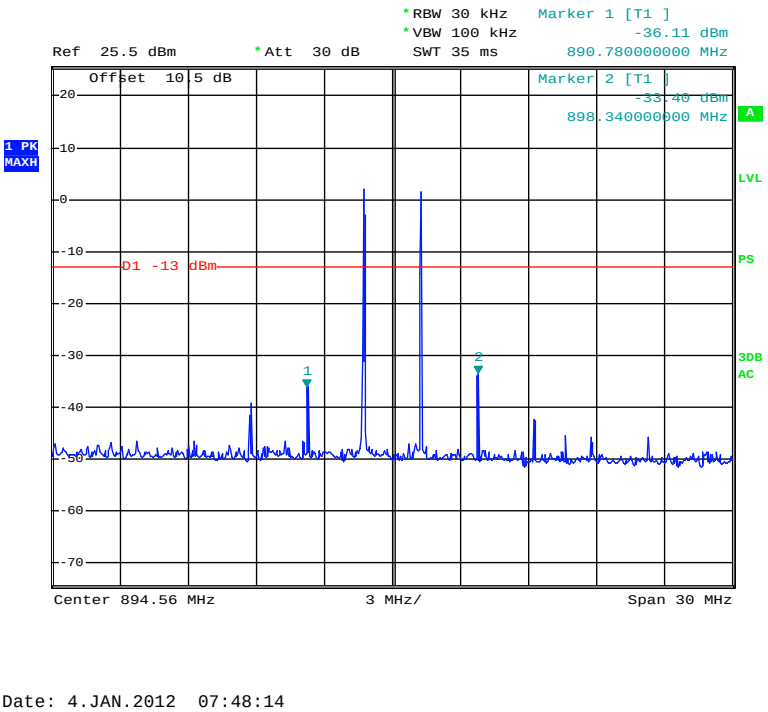
Uplink, Spurious Emissions at Antenna Terminal, Middle Channel



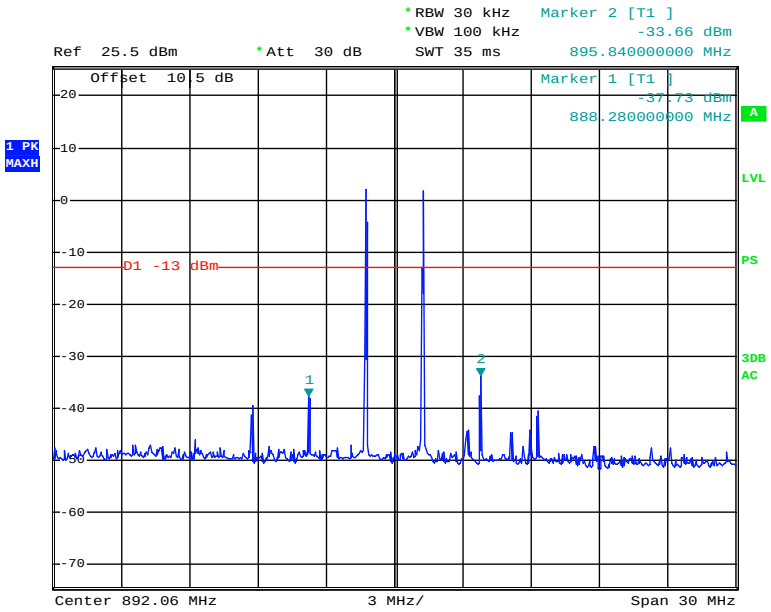
Uplink, Spurious Emissions at Antenna Terminal, High Channel



Downlink, Inter-modulation, Low-band edge

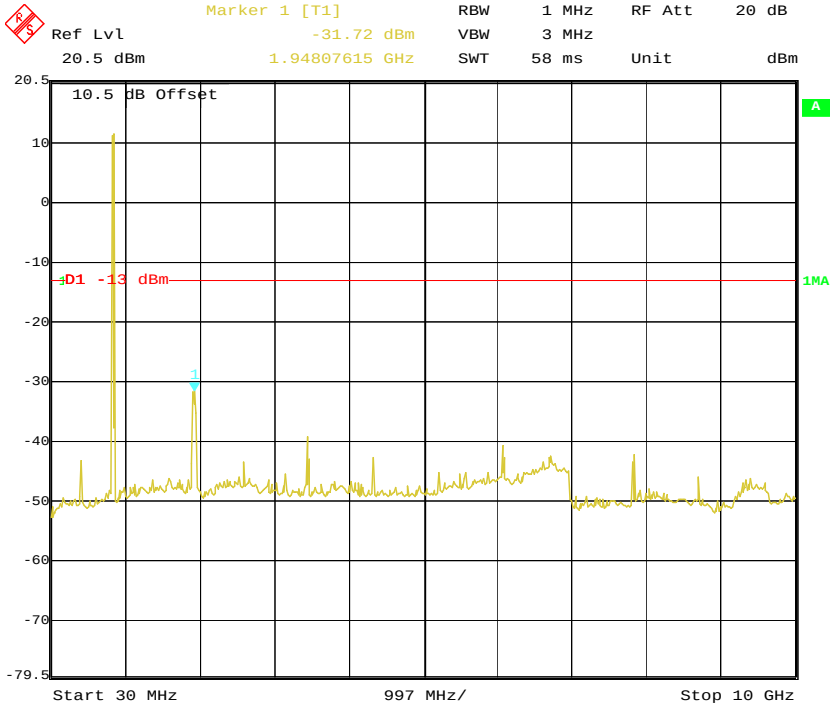


Downlink, Inter-modulation, High-band edge



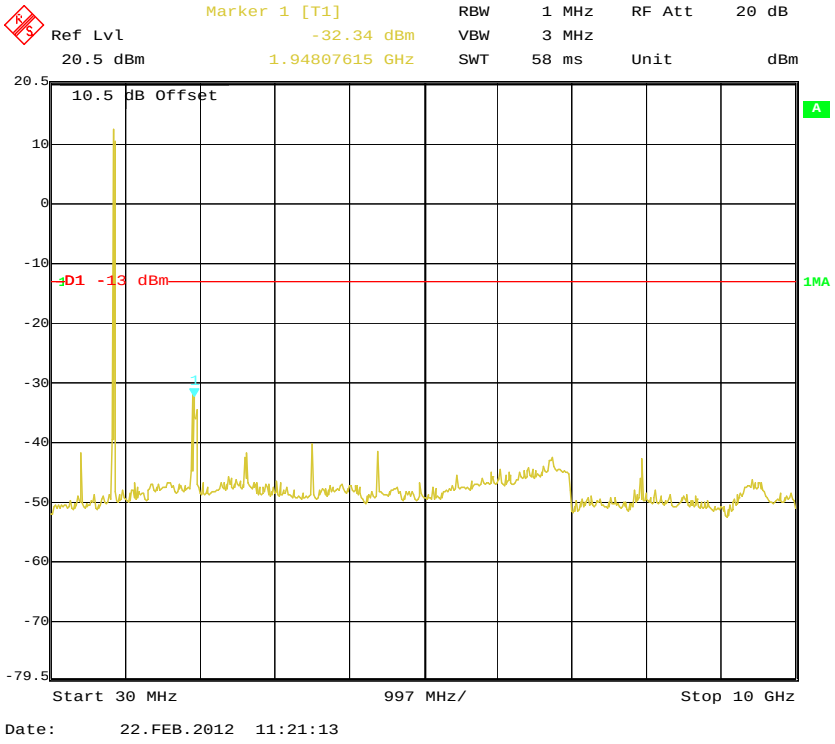
Date: 4.JAN.2012 08:02:58

Downlink, Spurious Emissions at Antenna Terminal, Low Channel

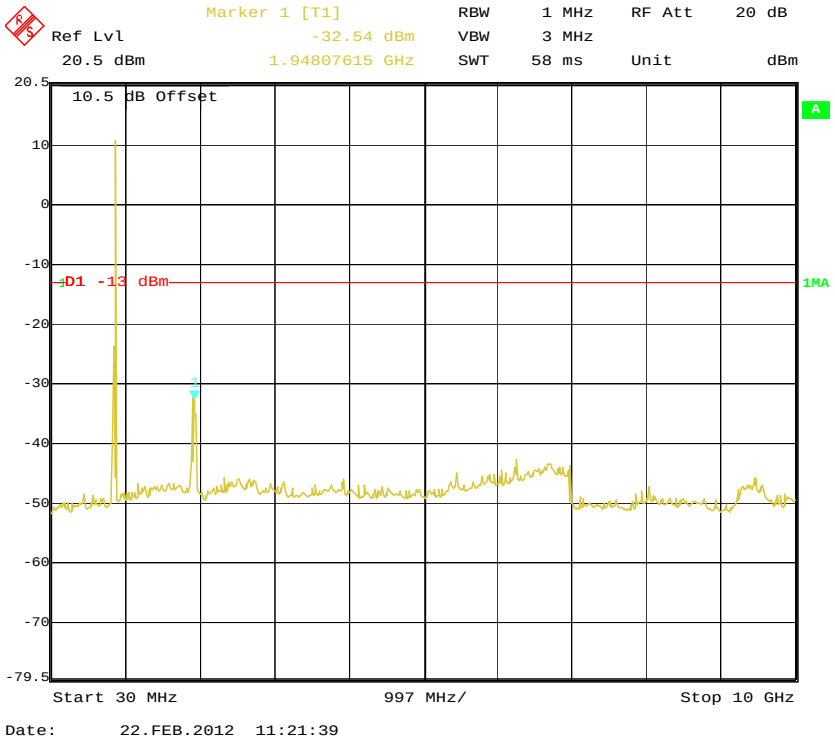


Date: 22.FEB.2012 11:20:40

Downlink, Spurious Emissions at Antenna Terminal, Middle Channel

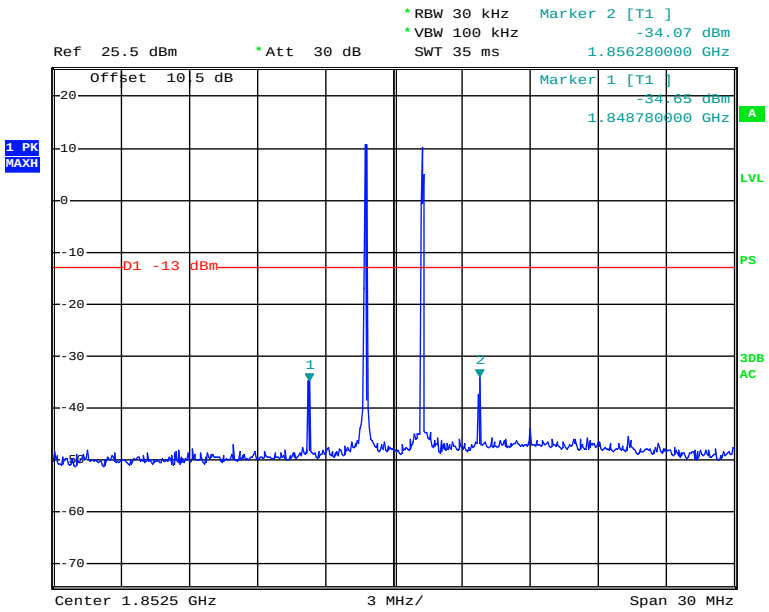


Downlink, Spurious Emissions at Antenna Terminal, High Channel



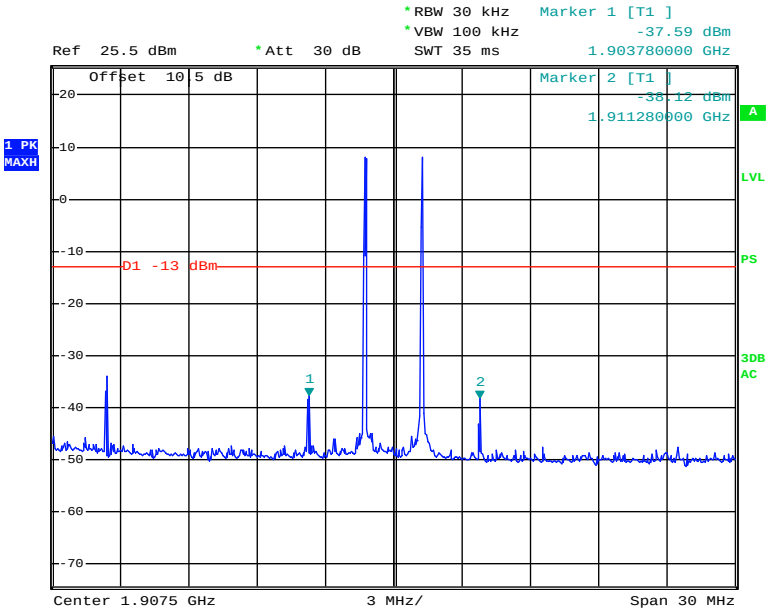
PCS Band (Part 24E)

Uplink, Inter-modulation, Low-band edge



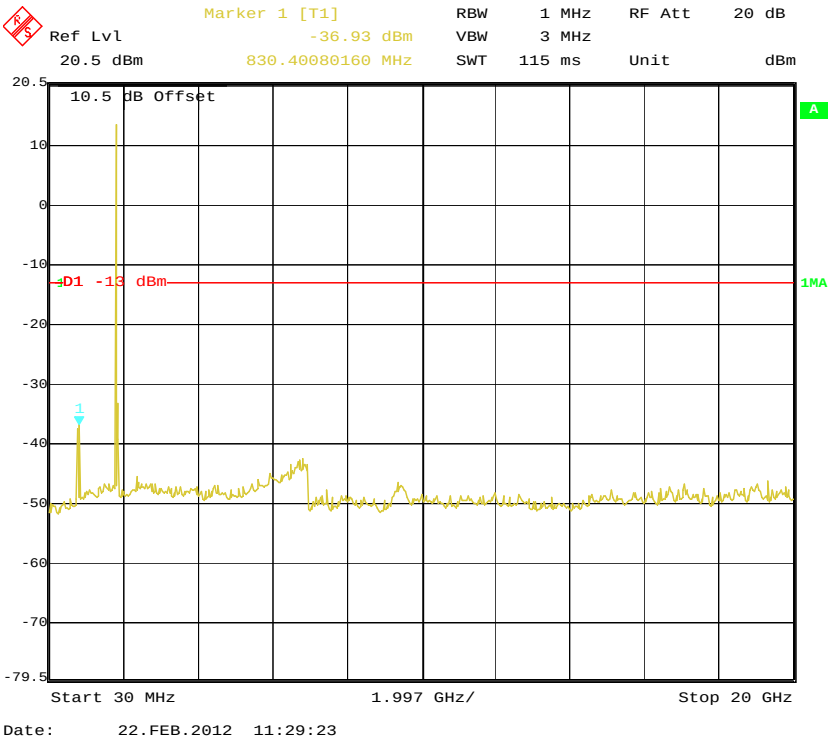
Date: 4.JAN.2012 07:57:26

Uplink, Inter-modulation, High-band edge

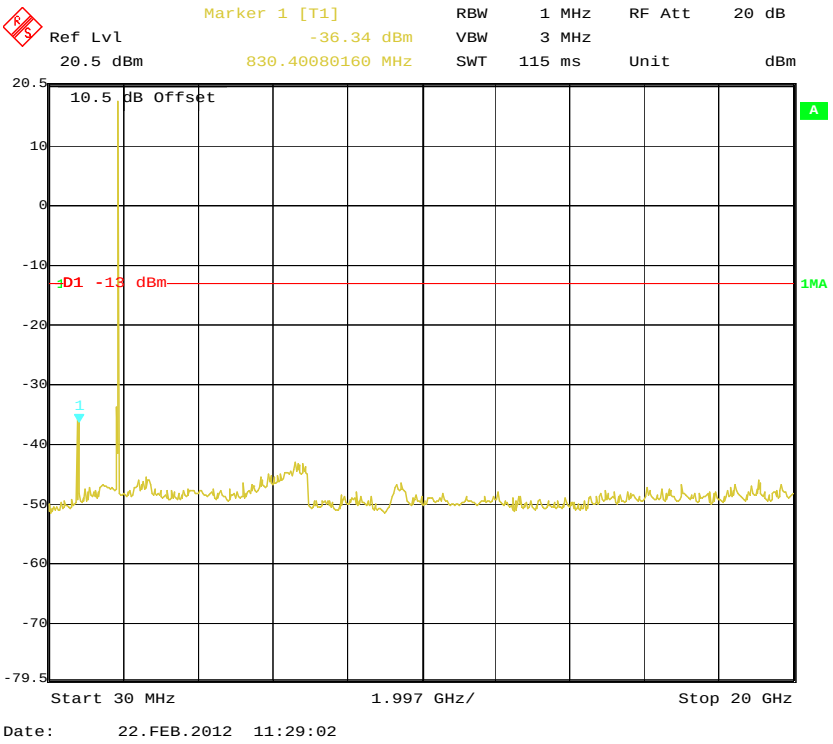


Date: 4.JAN.2012 08:00:00

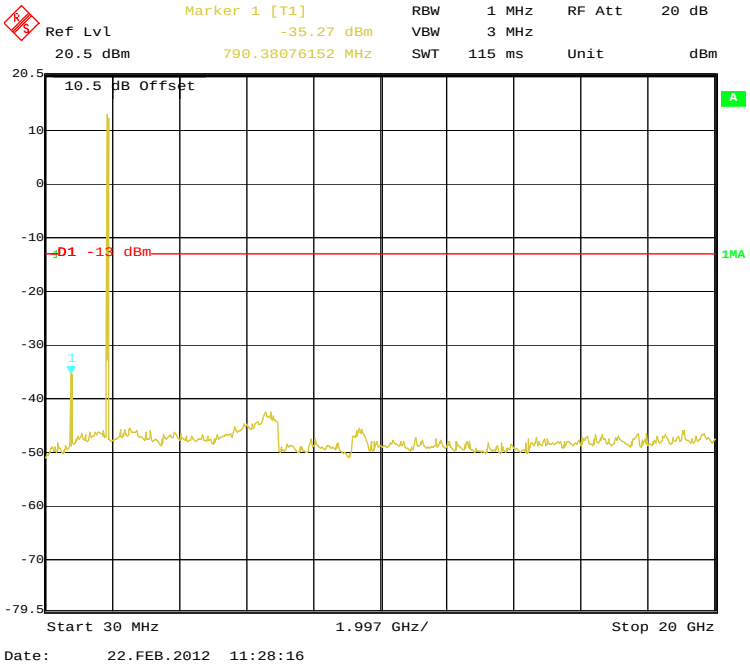
Uplink, Spurious Emissions at Antenna Terminal, Low Channel



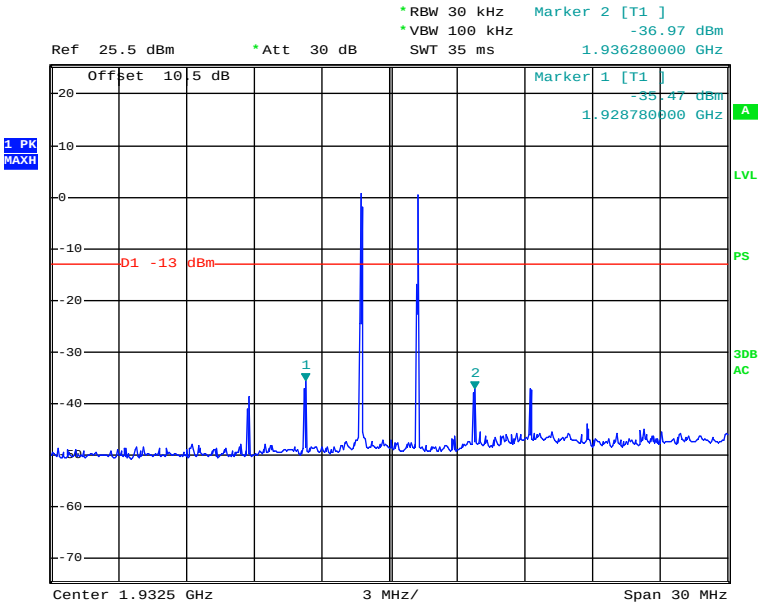
Uplink, Spurious Emissions at Antenna Terminal, Middle Channel



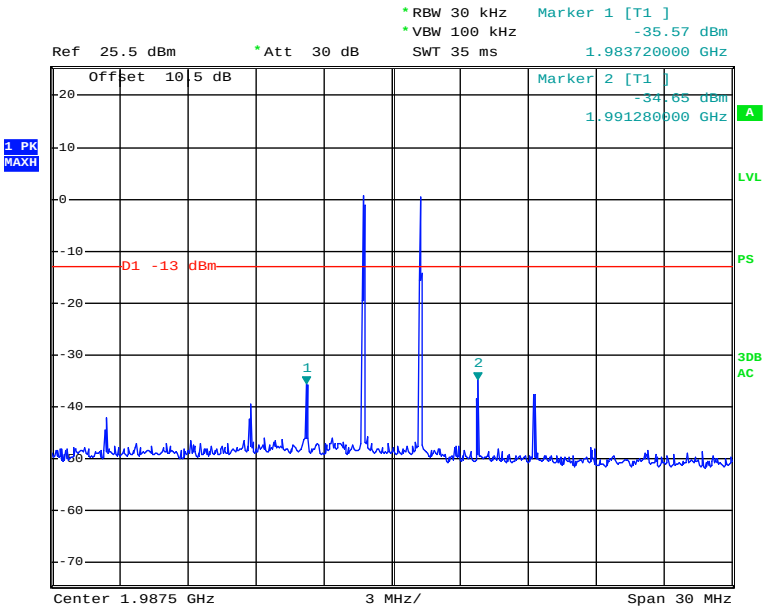
Uplink, Spurious Emissions at Antenna Terminal, High Channel



Downlink, Inter-modulation, Low-band edge

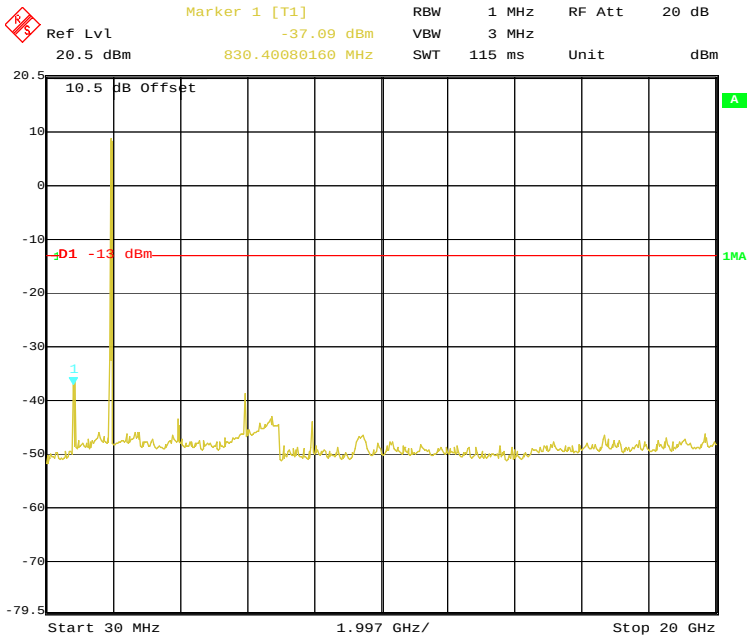


Downlink, Inter-modulation, High-band edge



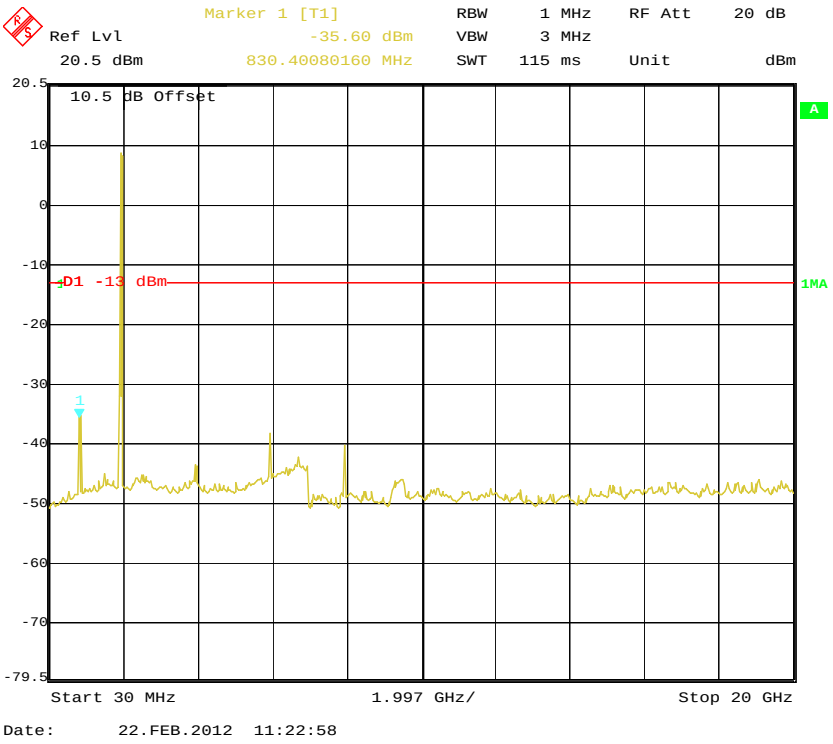
Date: 4.JAN.2012 07:42:08

Downlink, Spurious Emissions at Antenna Terminal, Low Channel

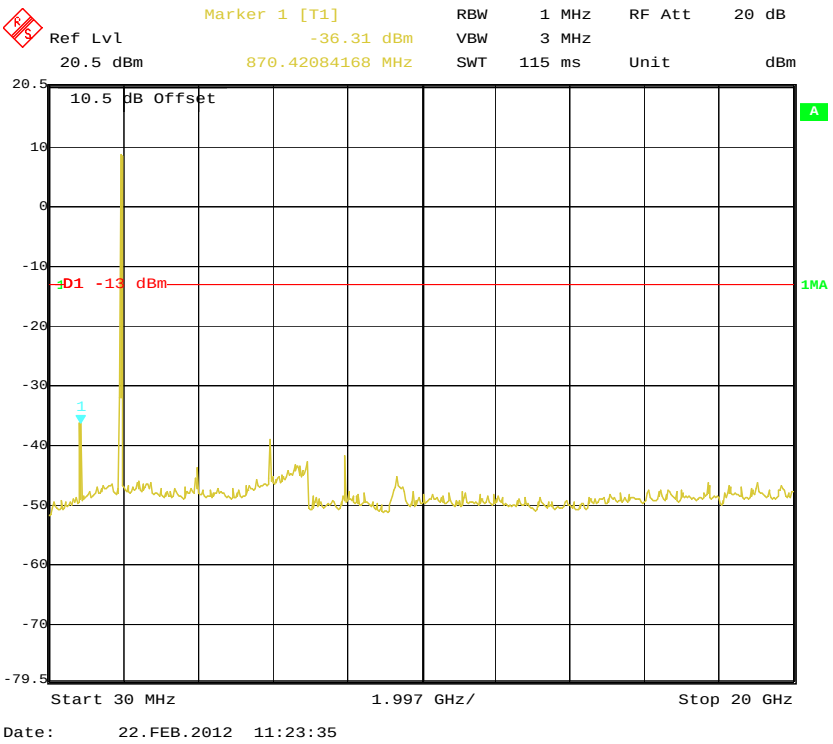


Date: 22.FEB.2012 11:22:30

Downlink, Spurious Emissions at Antenna Terminal, Middle Channel



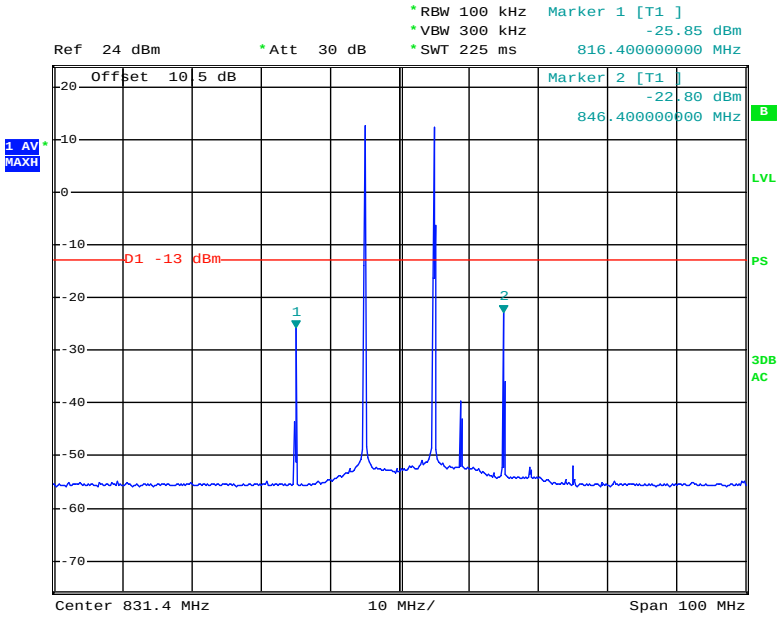
Downlink, Spurious Emissions at Antenna Terminal, High Channel



WCDMA

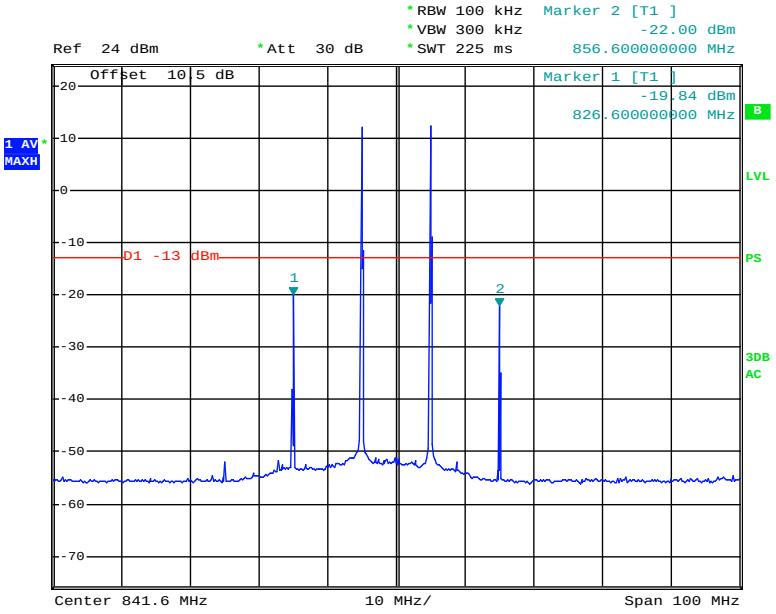
Cellular Band (Part 22H)

Uplink, Inter-modulation, Low-band edge



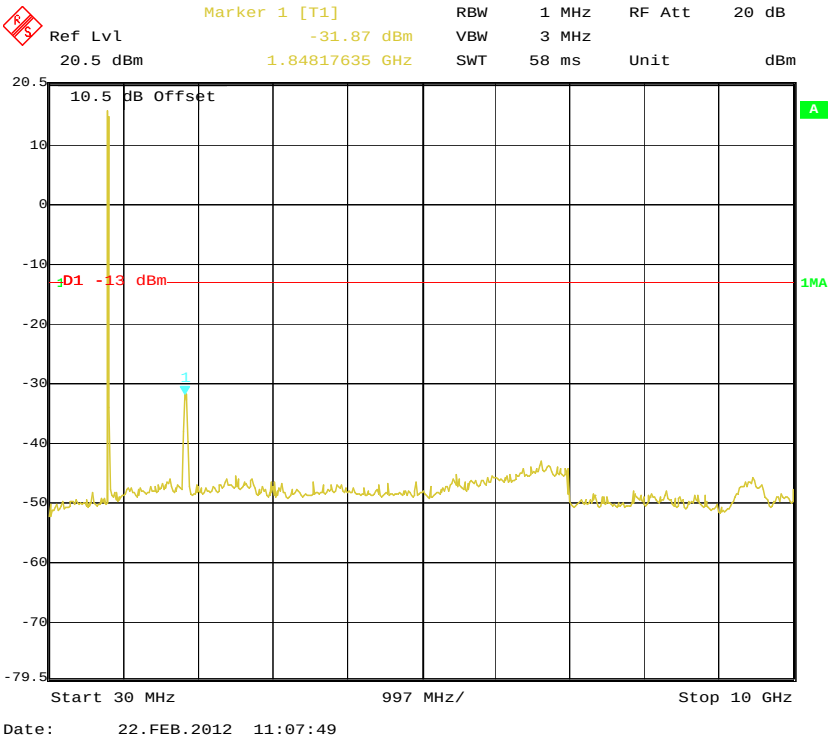
Date: 20.JAN.2012 08:53:29

Uplink, Inter-modulation, High-band edge

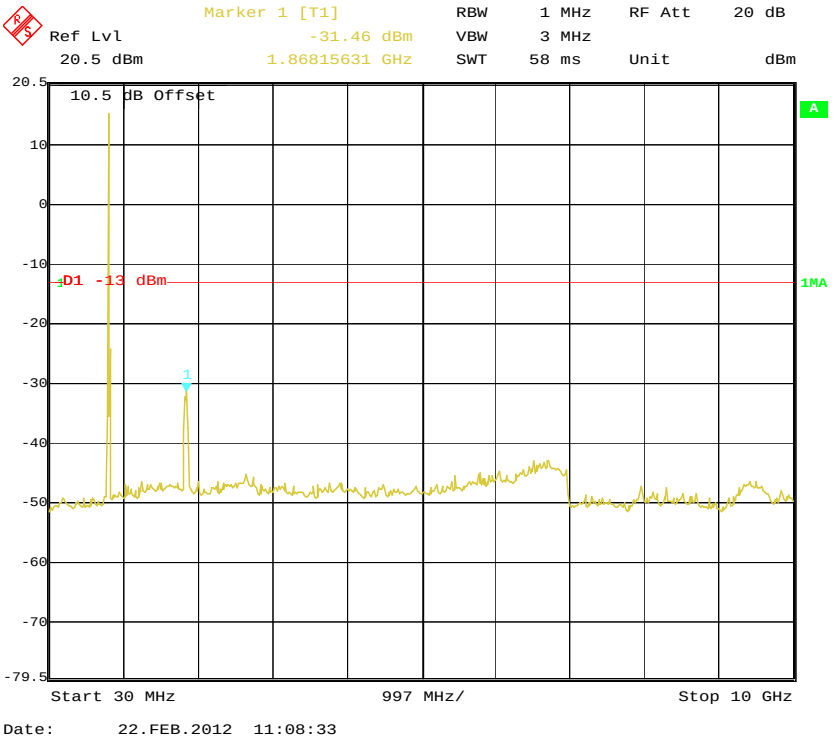


Date: 20.JAN.2012 08:55:01

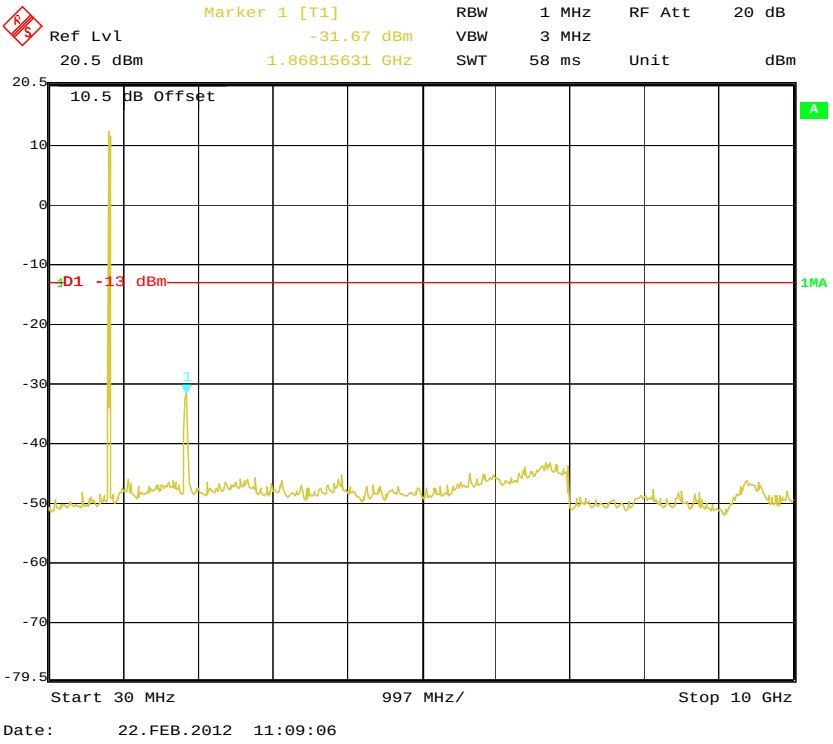
Uplink, Spurious Emissions at Antenna Terminal, Low Channel



Uplink, Spurious Emissions at Antenna Terminal, Middle Channel

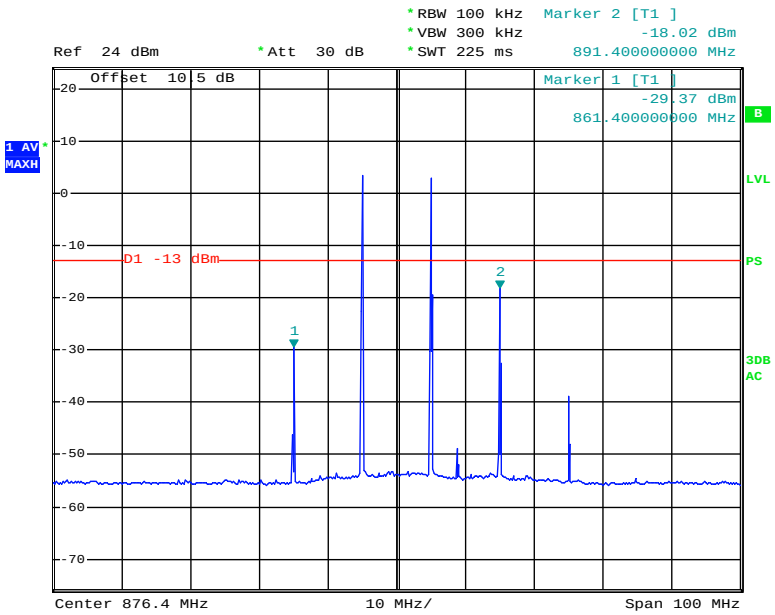


Uplink, Spurious Emissions at Antenna Terminal, High Channel



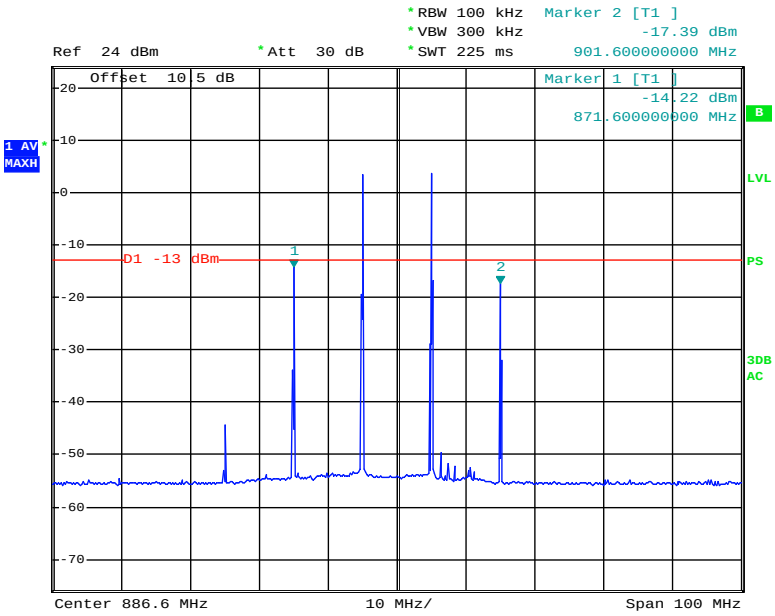
Date: 22.FEB.2012 11:09:06

Downlink, Inter-modulation, Low-band edge



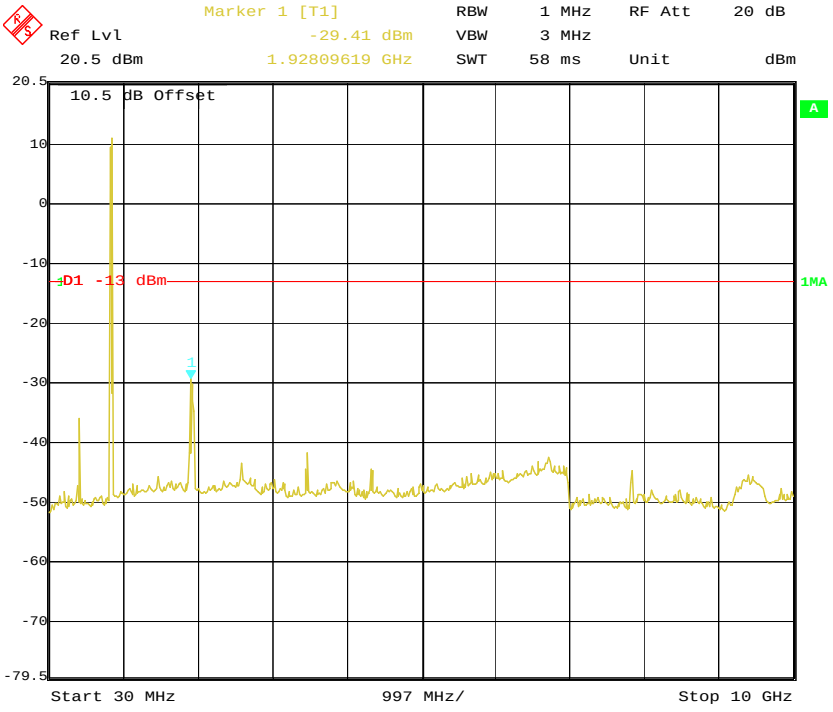
Date: 20.JAN.2012 08:59:50

Downlink, Inter-modulation, High-band edge



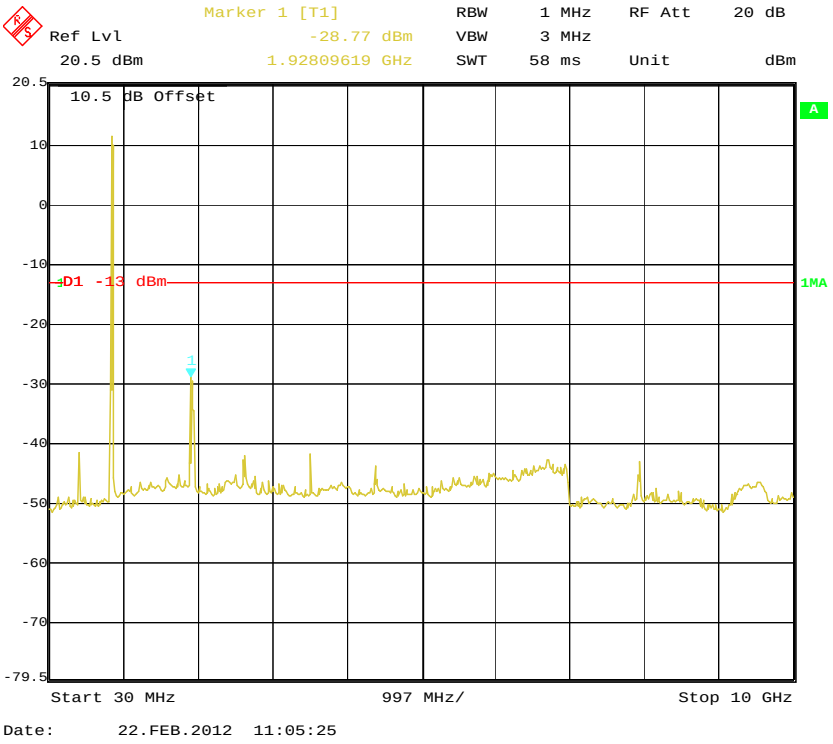
Date: 20.JAN.2012 09:13:08

Downlink, Spurious Emissions at Antenna Terminal, Low Channel

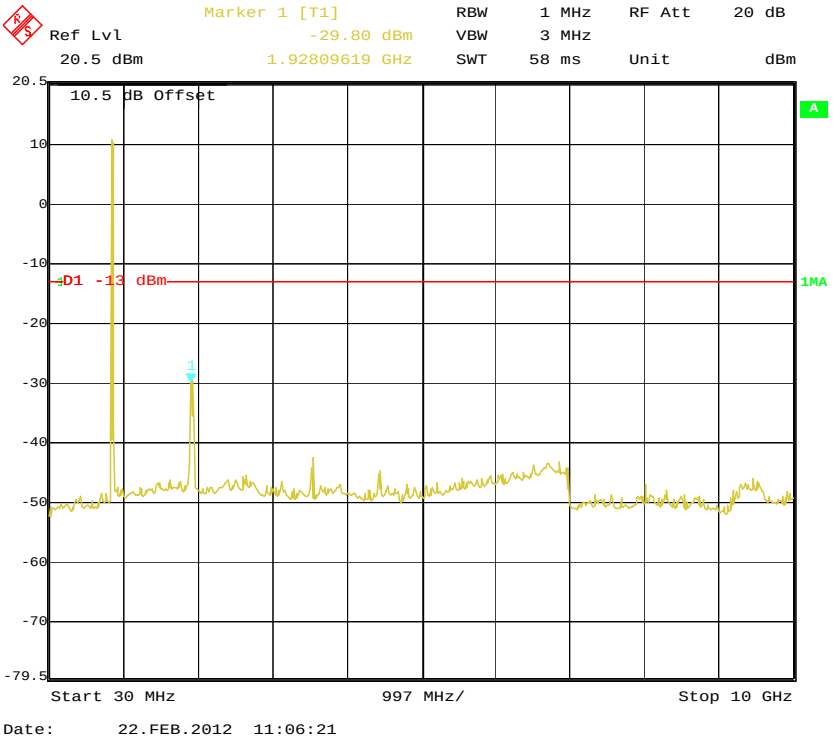


Date: 22.FEB.2012 11:05:50

Downlink, Spurious Emissions at Antenna Terminal, Middle Channel

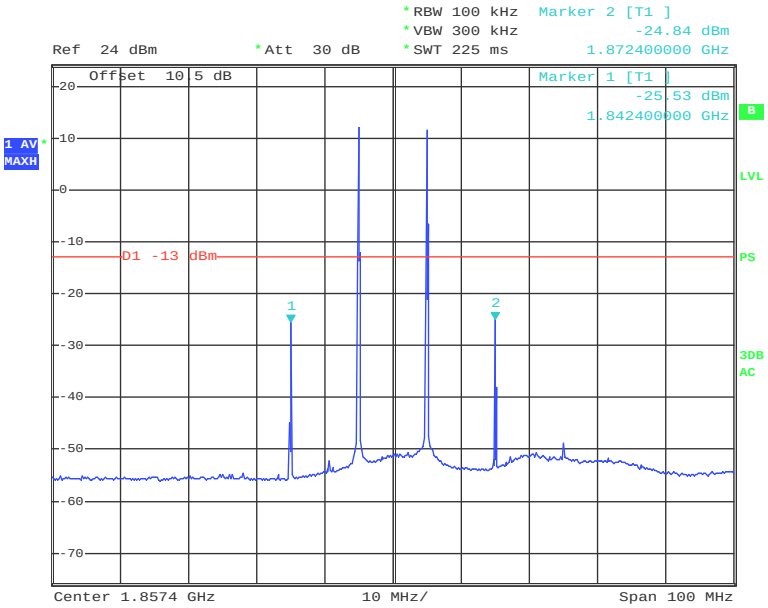


Downlink, Spurious Emissions at Antenna Terminal, High Channel



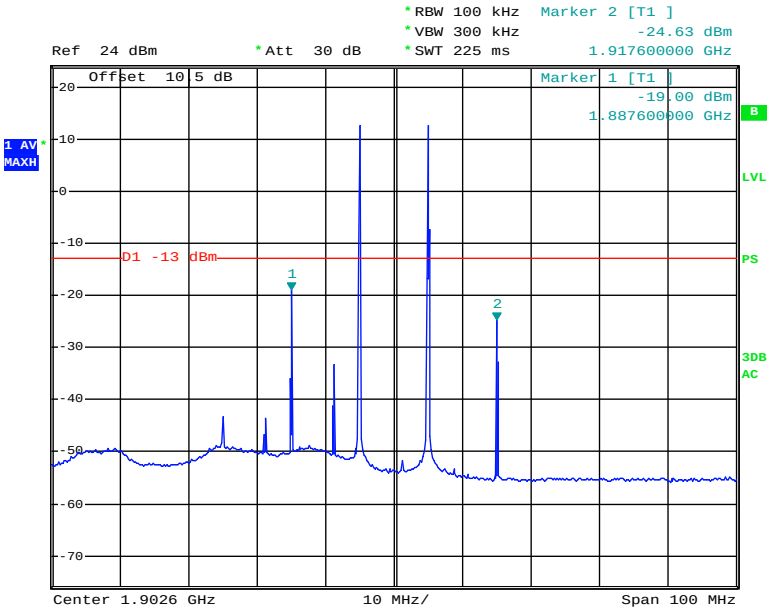
PCS Band (Part 24E)

Uplink, Inter-modulation, Low-band edge



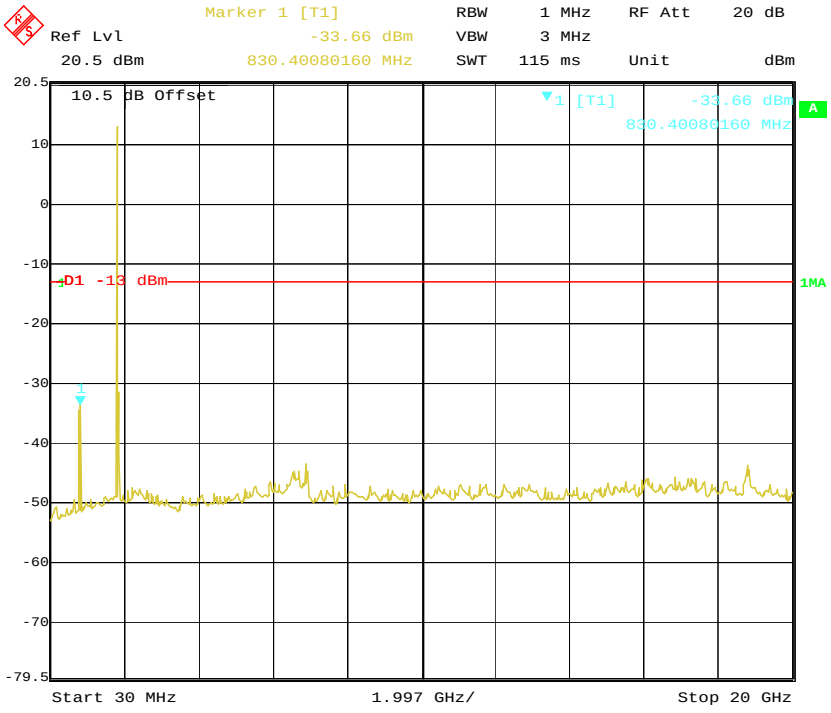
Date: 20.JAN.2012 08:51:50

Uplink, Inter-modulation, High-band edge

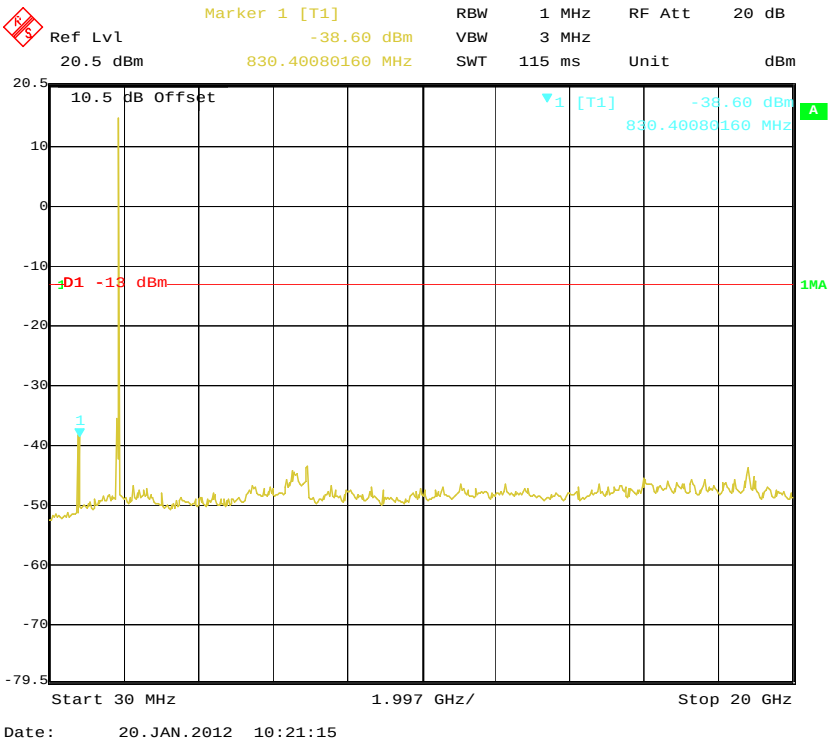


Date: 20.JAN.2012 08:50:08

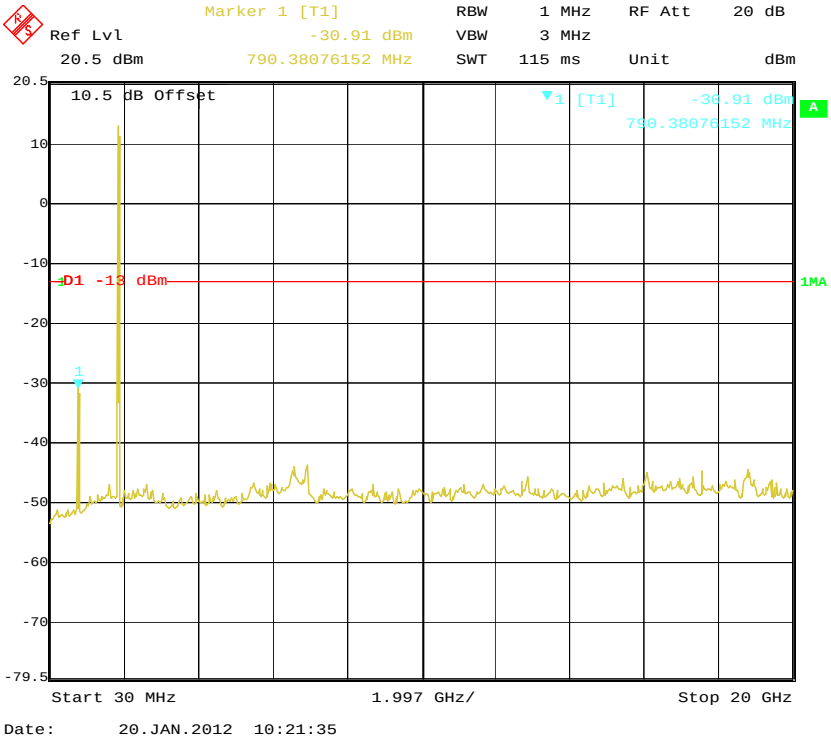
Uplink, Spurious Emissions at Antenna Terminal, Low Channel



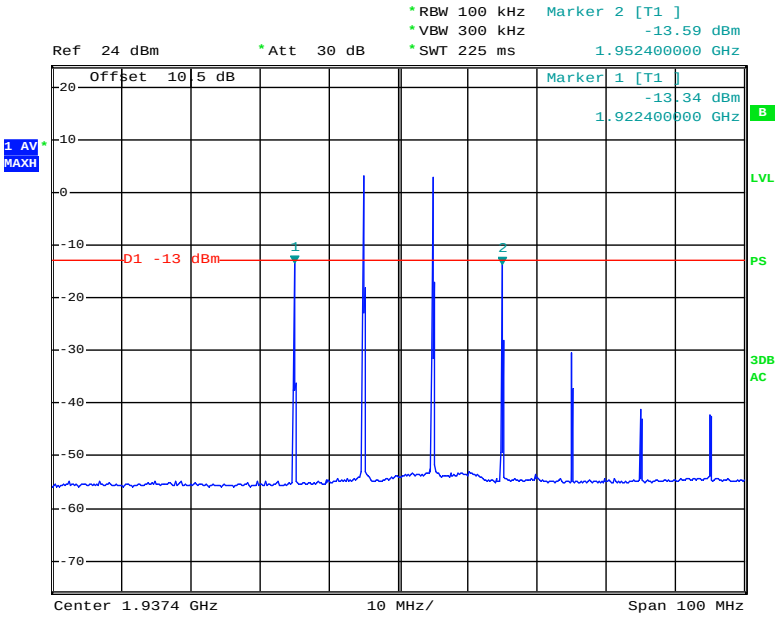
Uplink, Spurious Emissions at Antenna Terminal, Middle Channel



Uplink, Spurious Emissions at Antenna Terminal, High Channel

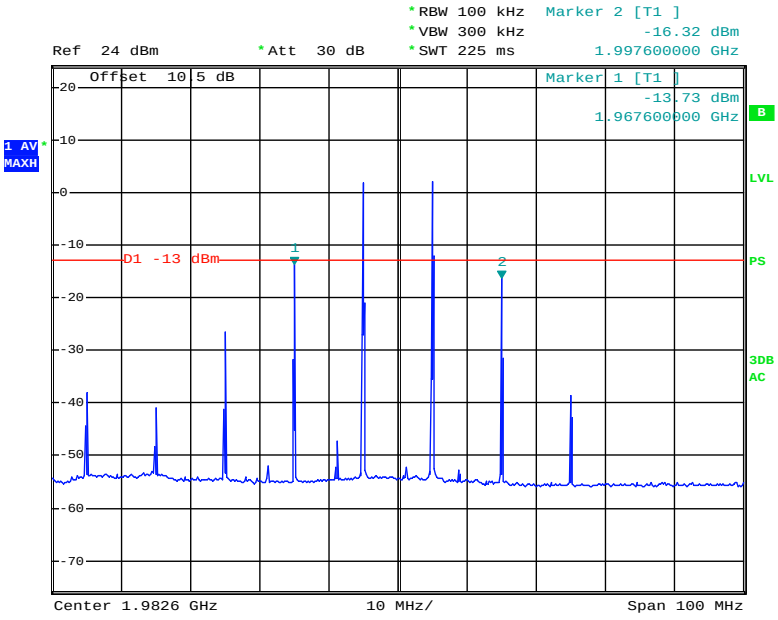


Downlink, Inter-modulation, Low-band edge



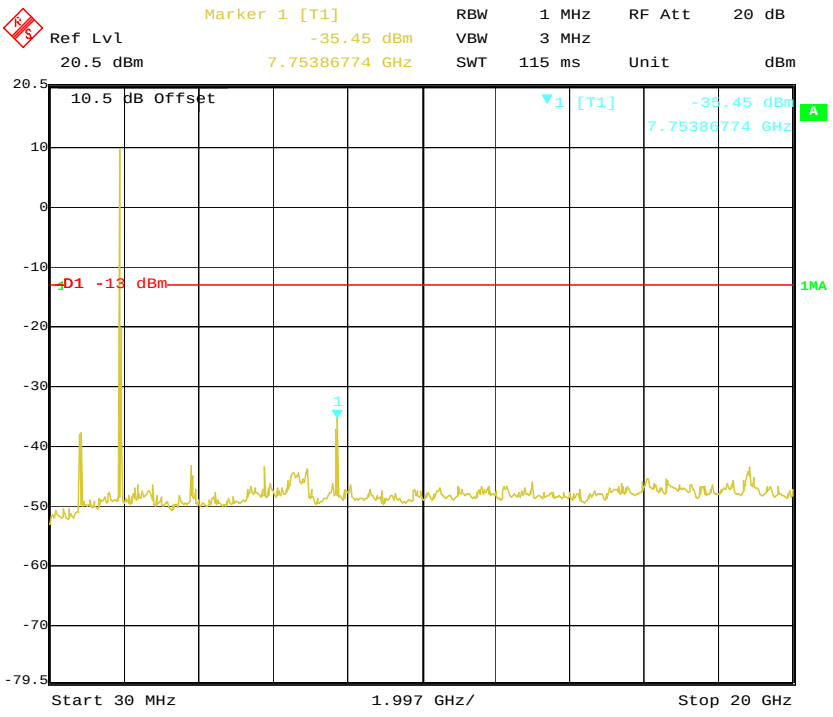
Date: 20.JAN.2012 09:15:47

Downlink, Inter-modulation, High-band edge



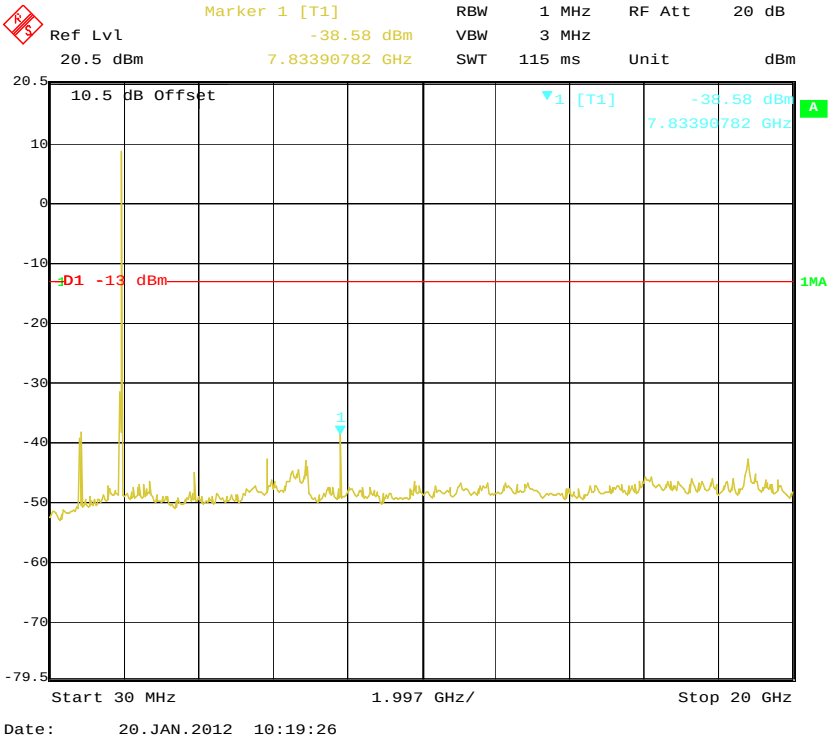
Date: 20.JAN.2012 09:18:10

Downlink, Spurious Emissions at Antenna Terminal, Low Channel

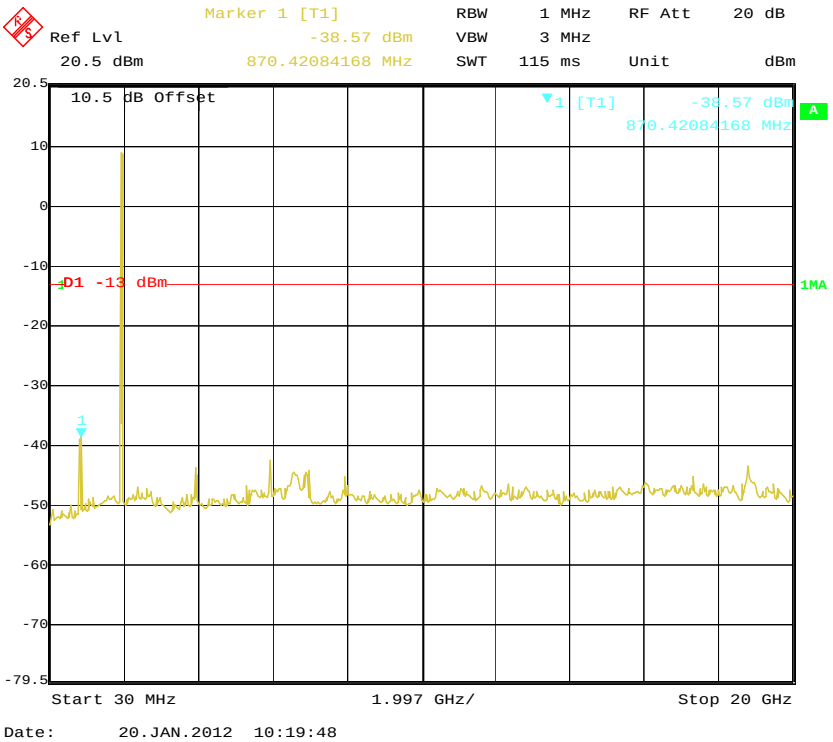


Date: 20.JAN.2012 10:19:00

Downlink, Spurious Emissions at Antenna Terminal, Middle Channel



Downlink, Spurious Emissions at Antenna Terminal, High Channel



FCC §2.1053, §22.917&§24.238- SPURIOUS RADIATED EMISSIONS

Applicable Standards

FCC § 2.1053, §22.917 and § 24.238.

Test Procedure

The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.

The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.

The frequency range up to tenth harmonic of the fundamental frequency was investigated.

Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a non-radiating cable. The absolute levels of the spurious emissions were measured by the substitution.
Spurious emissions in dB = 10 lg (TXpwr in Watts/0.001) – the absolute level
Spurious attenuation limit in dB = 43 + 10 Log_{10} (power out in Watts)

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Sunol Sciences	Horn Antenna	DRH-118	A052604	2011-05-05	2012-05-04
Sunol Sciences	Broadband Antenna	JB1	A040904-1	2011-07-05	2012-07-04
Rohde & Schwarz	Signal Analyzer	FSIQ 26	609358	2011-07-08	2012-07-07
Mini-Circuits	Amplifier	ZVA-213+	T-E27H	2011-03-08	2012-03-07
HP	Signal Generator	HP8657A	2849U00982	2011-10-28	2012-10-27
HP	Amplifier	HP8447D	2944A09795	2011-08-02	2012-08-01
HP	Synthesized Sweeper	8341B	2624A00116	2011-04-11	2012-04-10
COM POWER	Dipole Antenna	AD-100	041000	2011-04-25	2012-04-24
A.H. System	Horn Antenna	SAS-200/571	135	2011-03-07	2012-03-06
Electro-Mechanics	Horn Antenna	3116	9510-2270	2011-10-11	2012-10-10

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0kPa

The testing was performed by Henry Ding on 2012-01-10.

Test mode: Transmitting

Input with CW Signal

30MHz~ 10GHz:

Cellular Band (Part 22H)

Indicated		Table Angle Degree	Test Antenna		Substituted				Absolute Level (dBm)	Limit (dBm)	Margin (dB)
Frequency (MHz)	S.A. Reading (dBµV)		Height (m)	Polar (H/V)	Frequency (MHz)	Level (dBm)	Ant. Gain (dBi)	Cable Loss (dB)			
Middle Channel -836.6 MHz(Uplink)											
2496.01	47.05	155	1.7	V	2496.01	-46.4	7.20	1.21	-40.41	-13	27.41
2418.17	46.87	75	1.6	V	2418.17	-50.8	7.40	1.16	-44.56	-13	31.56
2496.01	47.00	98	1.9	H	2496.01	-54.5	7.20	1.21	-48.51	-13	35.51
2418.17	44.72	200	1.8	H	2418.17	-56.6	7.40	1.16	-50.36	-13	37.36
Middle Channel-881.6 MHz (Downlink)											
2496.03	46.97	89	1.9	V	2496.03	-46.5	7.20	1.21	-40.51	-13	27.51
2418.14	46.57	65	1.5	V	2418.14	-51.1	7.40	1.16	-44.86	-13	31.86
2496.03	47.24	16	1.8	H	2496.03	-54.3	7.20	1.21	-48.31	-13	35.31
2418.14	45.84	156	1.6	H	2418.14	-55.5	7.40	1.16	-49.26	-13	36.26

30MHz~ 20GHz:

PCS Band (Part 24E)

Indicated		Table Angle Degree	Test Antenna		Substituted				Absolute Level (dBm)	Limit (dBm)	Margin (dB)
Frequency (MHz)	S.A. Reading (dBµV)		Height (m)	Polar (H/V)	Frequency (MHz)	Level (dBm)	Ant. Gain (dBi)	Cable Loss (dB)			
Middle Channel -1880 MHz(Uplink)											
4014.14	38.67	290	1.6	H	4014.14	-51.6	6.60	1.56	-46.56	-13	33.56
4014.14	38.98	300	1.6	V	4014.14	-52.9	6.60	1.56	-47.86	-13	34.86
4187.80	38.65	145	1.7	V	4187.80	-56.3	7.60	1.59	-50.29	-13	37.29
4187.80	37.24	198	1.5	H	4187.80	-59.7	7.60	1.59	-53.69	-13	40.69
Middle Channel-1960 MHz (Downlink)											
4035.38	40.21	105	1.6	H	4035.38	-50.1	6.60	1.56	-45.06	-13	32.06
4035.38	40.68	165	1.5	V	4035.38	-51.2	6.60	1.56	-46.16	-13	33.16
4165.74	37.86	99	1.9	V	4165.74	-57.1	7.60	1.59	-51.09	-13	38.09
4165.74	36.69	160	1.6	H	4165.74	-60.2	7.60	1.59	-54.19	-13	41.19

Note: The other data which below the limit 20dB was not recorded.

FCC §22.917(a) &§24.238(a) - BAND EDGES

Applicable Standards

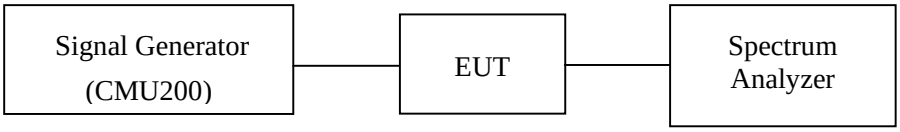
According to FCC § 22.917(a), the power of any emissions outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

According to FCC §24.238(a), the power of any emissions 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 the input of the spectrum analyzer through sufficient attenuation.

The center of the spectrum analyzer was set to block edge frequency.



Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Rohde & Schwarz	EMI Test Receiver	ESCI	100224	2011-11-11	2012-11-10

*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Shenzhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0kPa

The testing was performed by Henry Ding from 2012-01-04 to 2012-01-20.

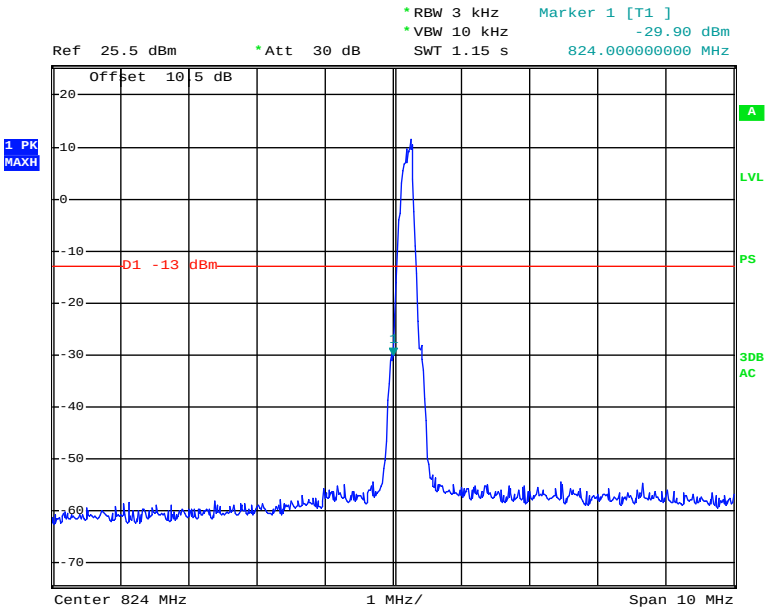
Please refer to the following tables and plots.

GSM

Mode	Frequency (MHz)	Emission (dBm)	＜Limit (dBm)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	824.00	-29.90	-13
	849.00	-31.65	-13
Downlink (869-894 MHz)	869.00	-36.65	-13
	894.00	-37.83	-13
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1850.00	-29.25	-13
	1910.00	-27.70	-13
Downlink (1930-1990 MHz)	1930.00	-39.07	-13
	1990.00	-38.01	-13

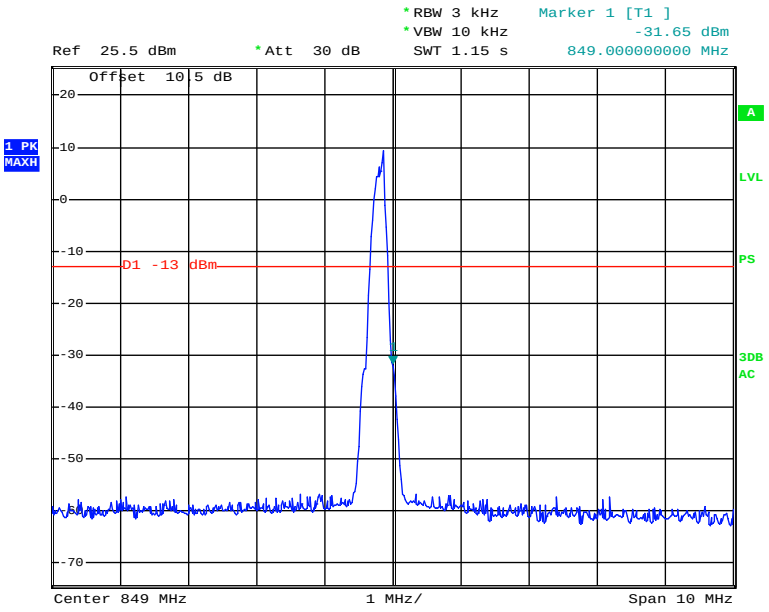
Cellular Band (Part 22H)

Uplink, Left Bandage



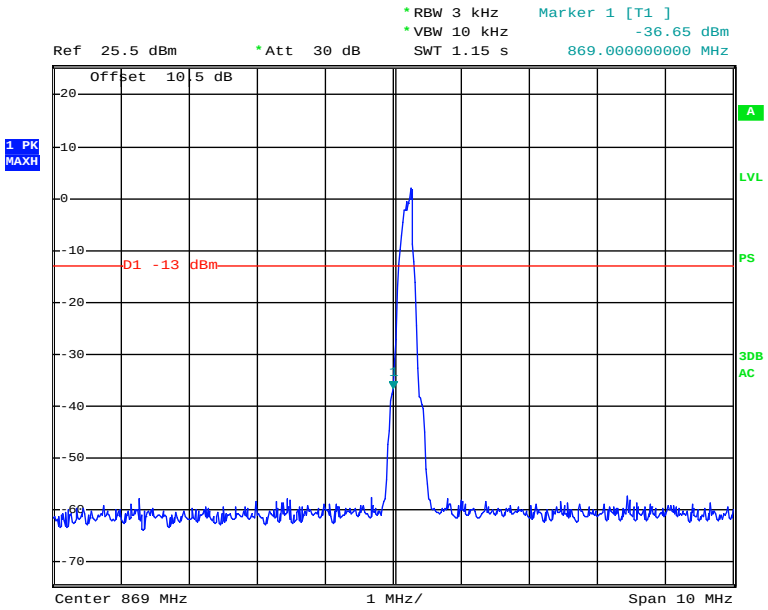
Date: 4.JAN.2012 13:03:04

Uplink, Right Bandage



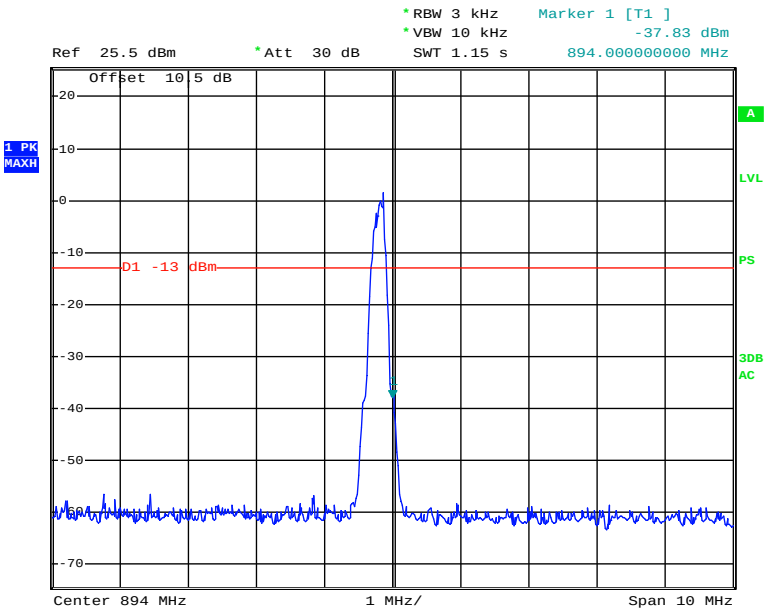
Date: 4.JAN.2012 13:03:41

Downlink, Left Bandage



Date: 4.JAN.2012 13:07:21

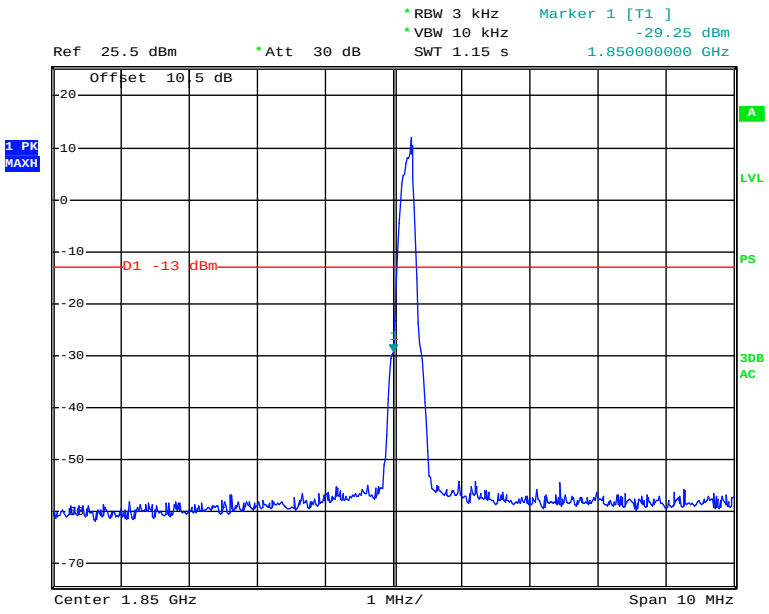
Downlink, Right Bandage



Date: 4.JAN.2012 13:06:38

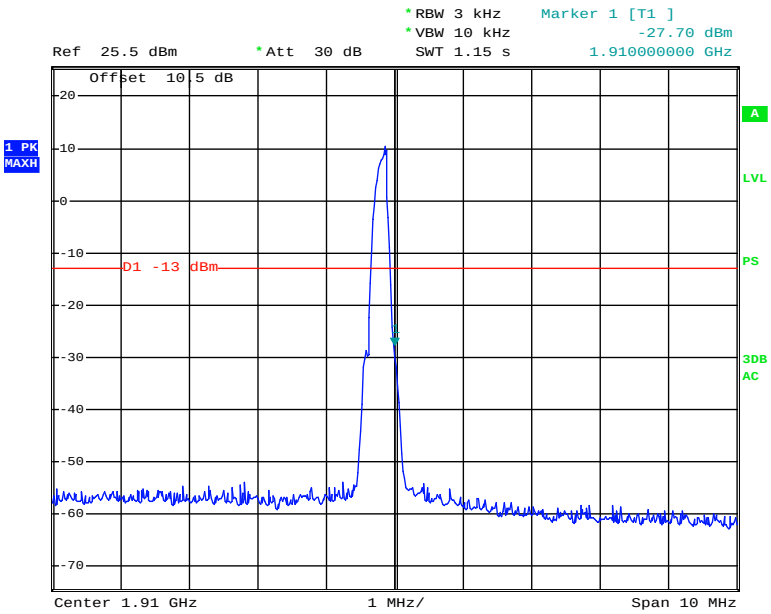
PCS Band (Part 24E)

Uplink, Left Bandage



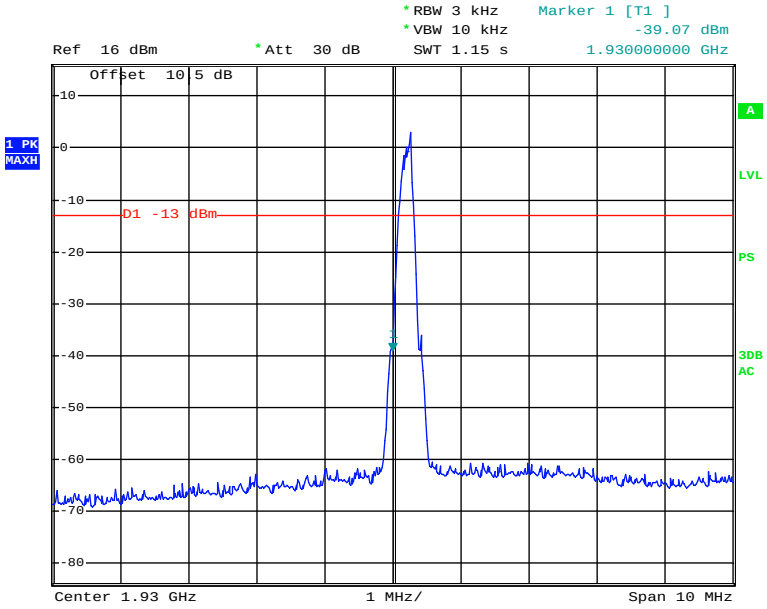
Date: 4.JAN.2012 12:55:58

Uplink, Right Bandage



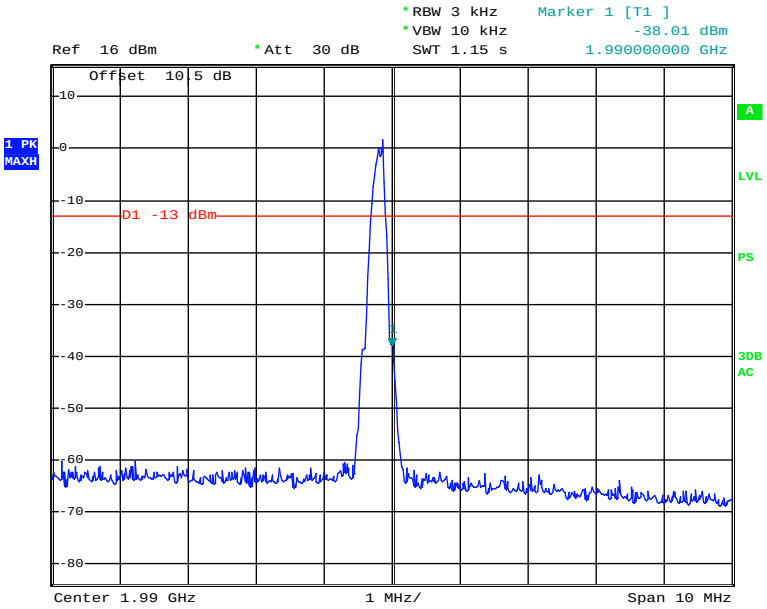
Date: 4.JAN.2012 12:56:59

Downlink, Left Bandage



Date: 4.JAN.2012 12:48:12

Downlink, Right Bandage



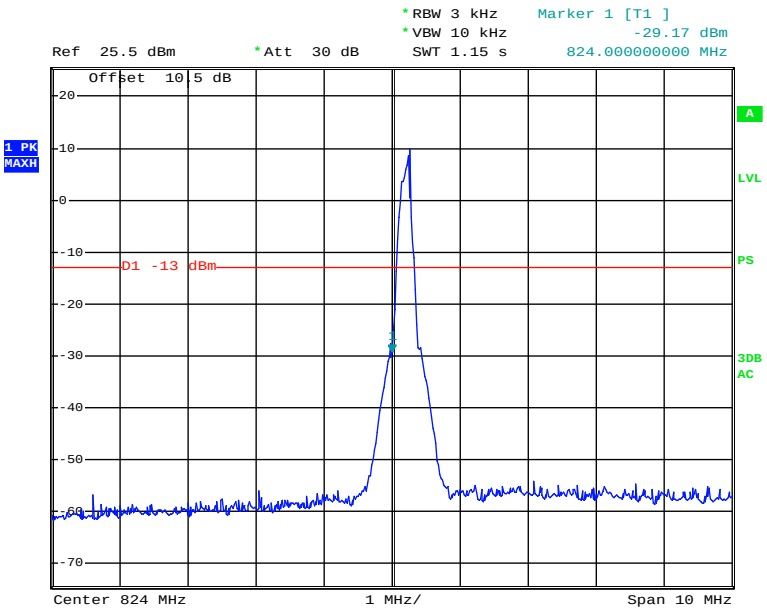
Date: 4.JAN.2012 12:49:12

EDGE:

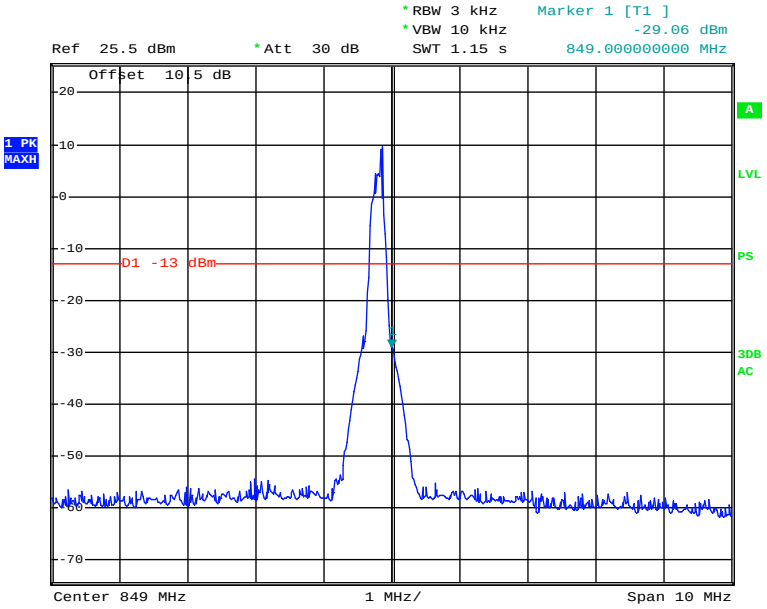
Mode	Frequency (MHz)	Emission (dBm)	＜Limit (dBm)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	824.00	-29.17	-13
	849.00	-29.06	-13
Downlink (869-894 MHz)	869.00	-36.67	-13
	894.00	-37.73	-13
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1850.00	-28.96	-13
	1910.00	-29.58	-13
Downlink (1930-1990 MHz)	1930.00	-33.09	-13
	1990.00	-32.31	-13

Cellular Band (Part 22H)

Uplink, Left Bandage

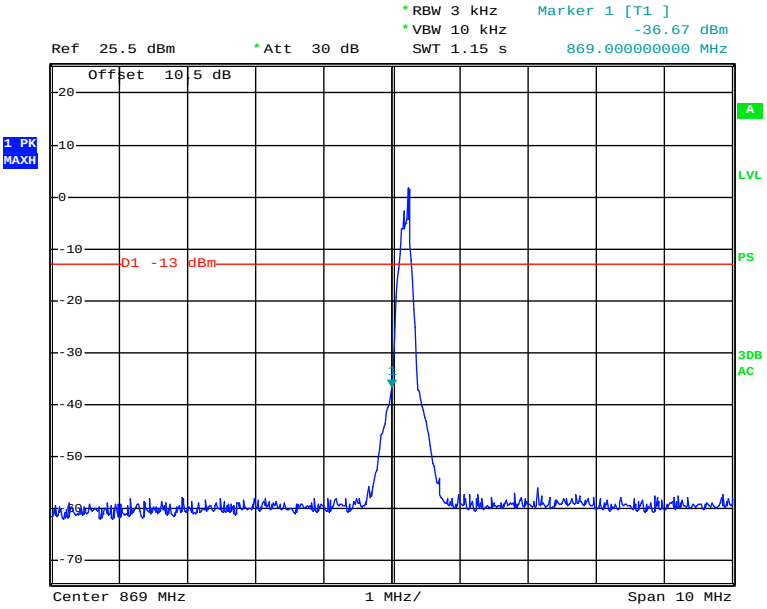


Uplink, Right Bandage



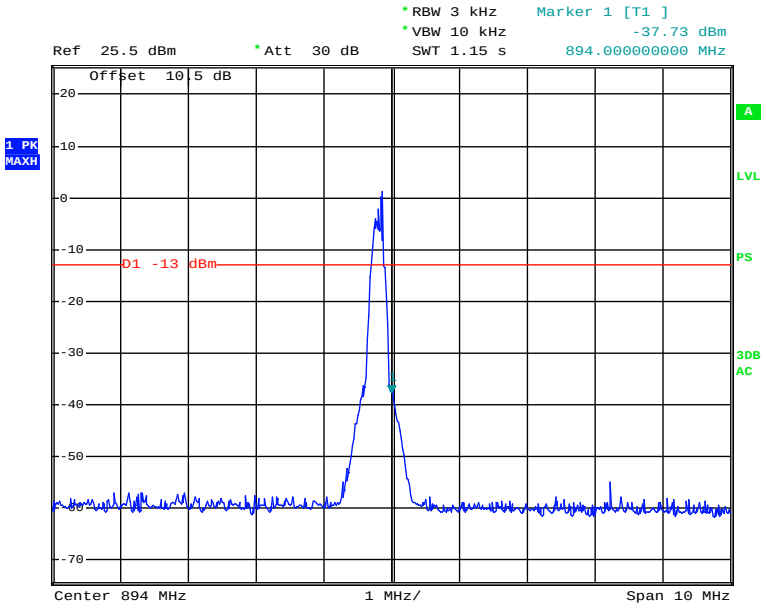
Date: 4.JAN.2012 13:04:17

Downlink, Left Bandage



Date: 4.JAN.2012 13:08:06

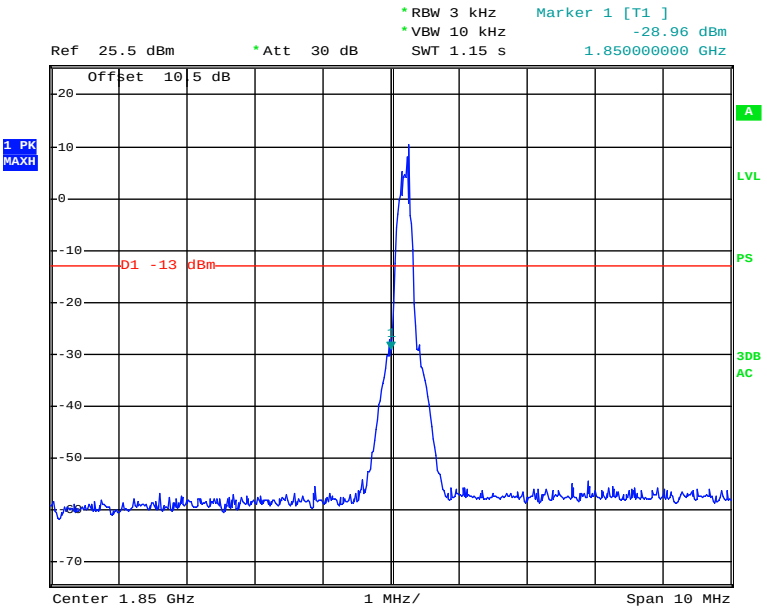
Downlink, Right Bandage



Date: 4.JAN.2012 13:06:03

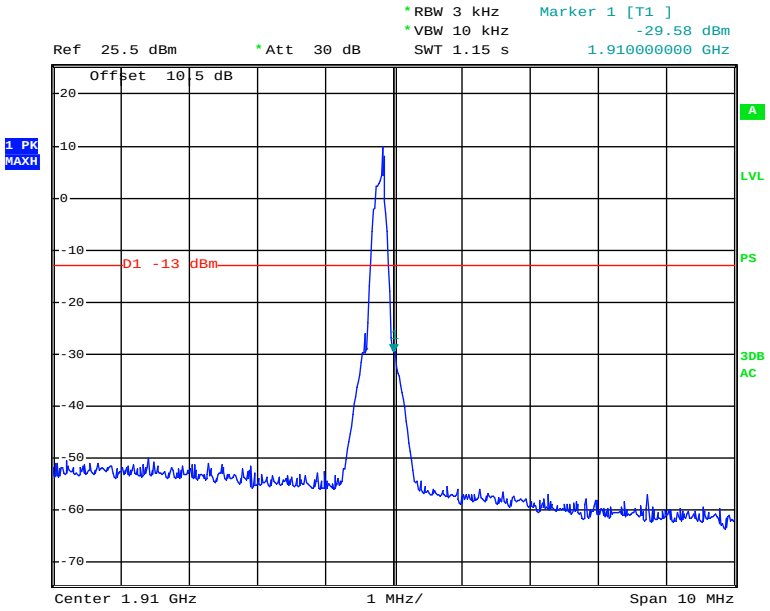
PCS Band (Part 24E)

Uplink, Left Bandage



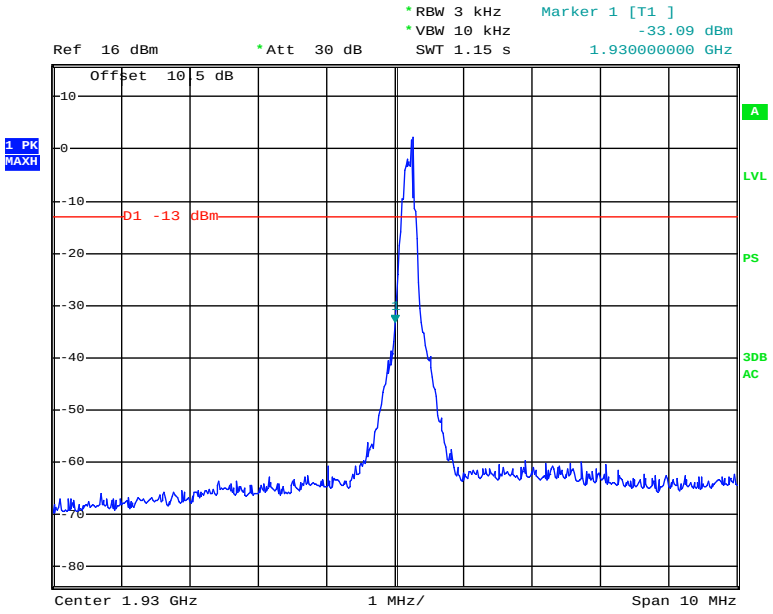
Date: 4.JAN.2012 12:54:49

Uplink, Right Bandage



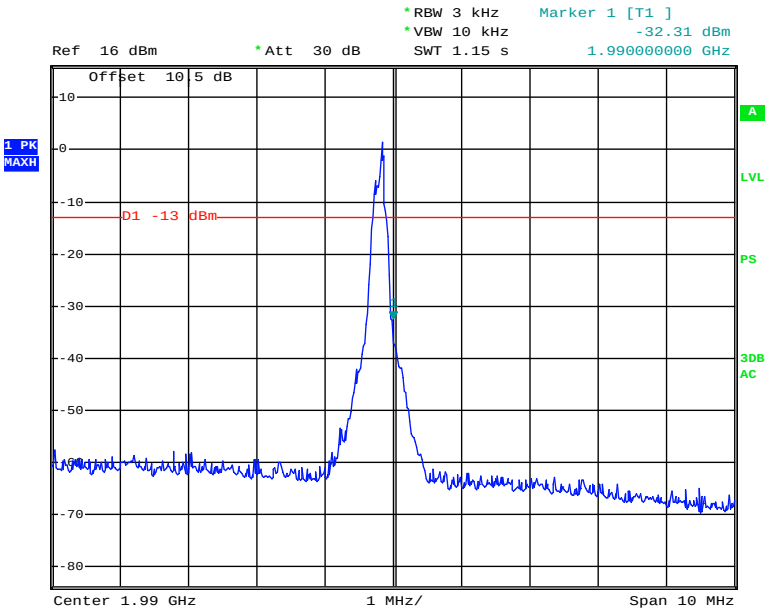
Date: 4.JAN.2012 12:57:49

Downlink, Left Bandage



Date: 4.JAN.2012 12:51:02

Downlink, Right Bandage



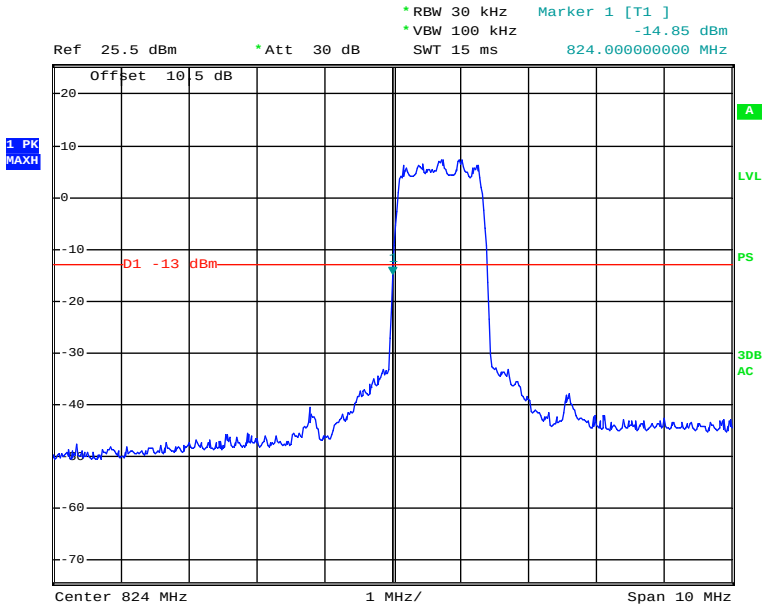
Date: 4.JAN.2012 12:50:01

CDMA:

Mode	Frequency (MHz)	Emission (dBm)	＜Limit (dBm)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	824.00	-14.85	-13
	849.00	-14.04	-13
Downlink (869-894 MHz)	869.00	-22.98	-13
	894.00	-21.36	-13
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1850.0	-45.43	-13
	1910.00	-40.07	-13
Downlink (1930-1990 MHz)	1930.00	-35.42	-13
	1990.00	-33.13	-13

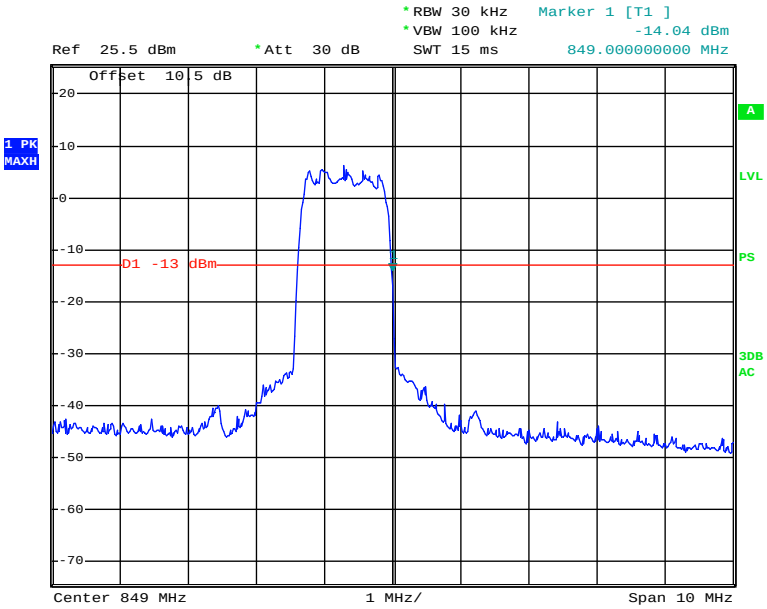
Cellular Band (Part 22H)

Uplink, Left Bandage



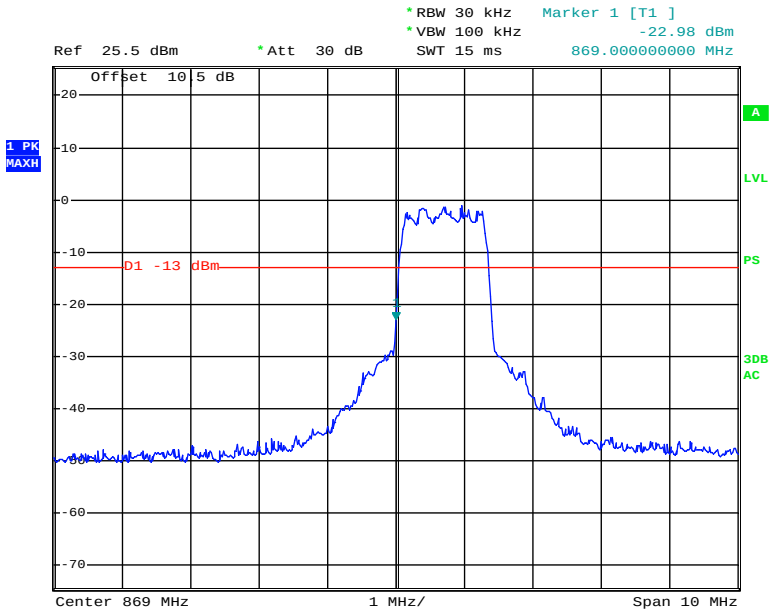
Date: 4.JAN.2012 06:59:04

Uplink, Right Bandage



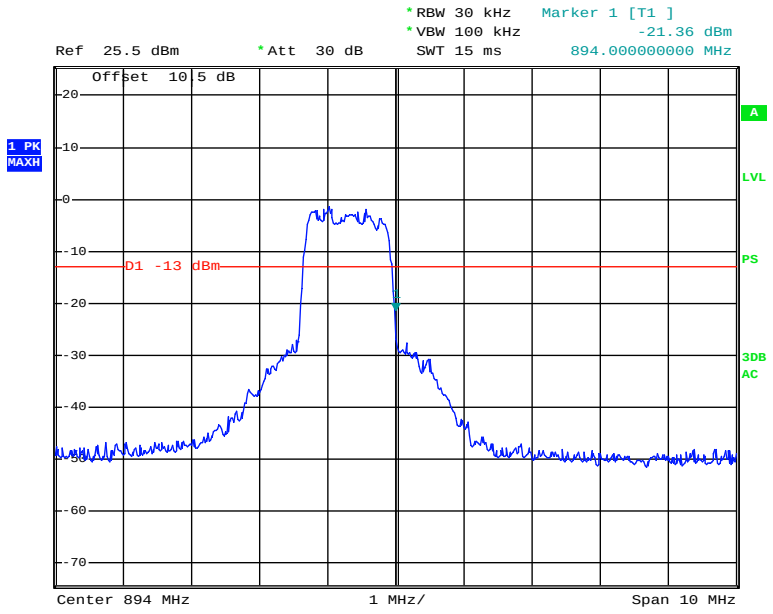
Date: 4.JAN.2012 07:13:57

Downlink, Left Bandage



Date: 4.JAN.2012 07:21:42

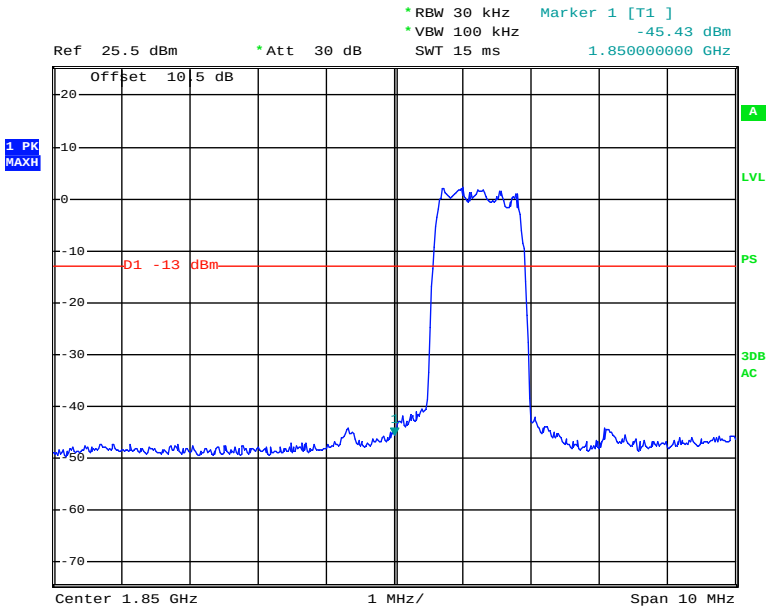
Downlink, Right Bandage



Date: 4.JAN.2012 07:22:21

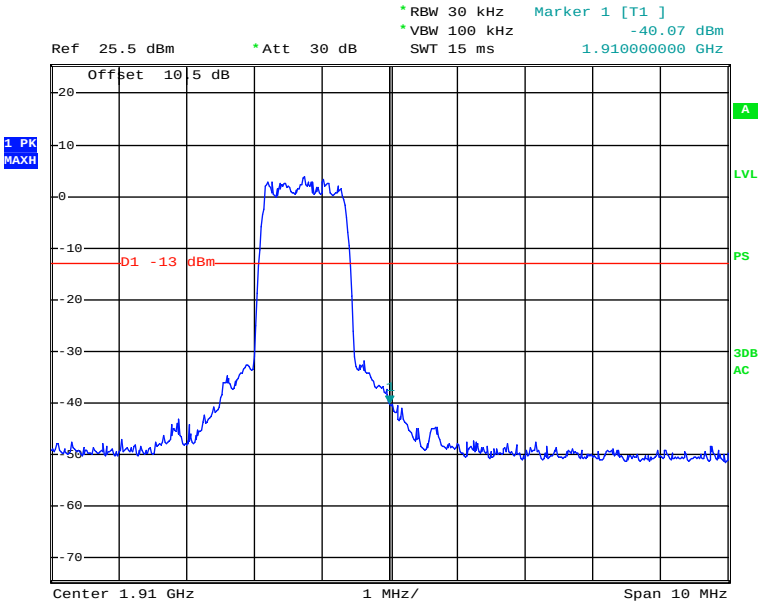
PCS Band (Part 24E)

Uplink, Left Bandage



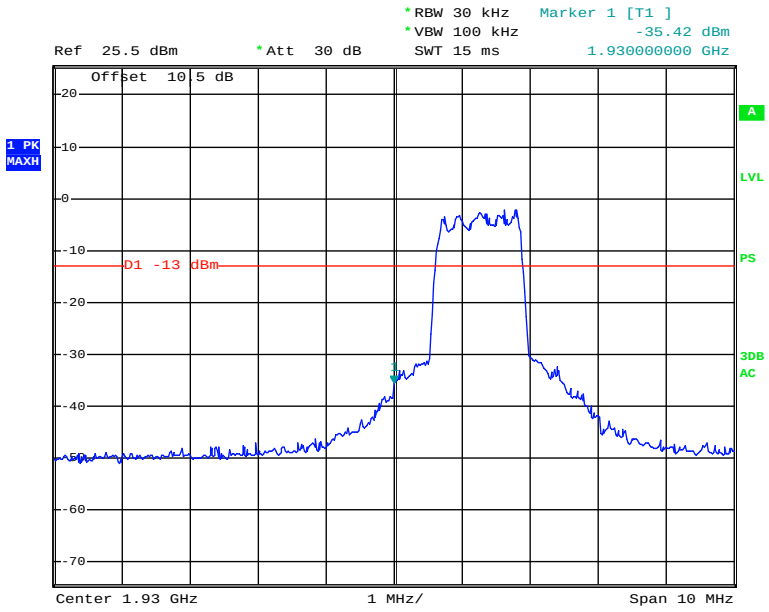
Date: 22.FEB.2012 10:17:10

Uplink, Right Bandage



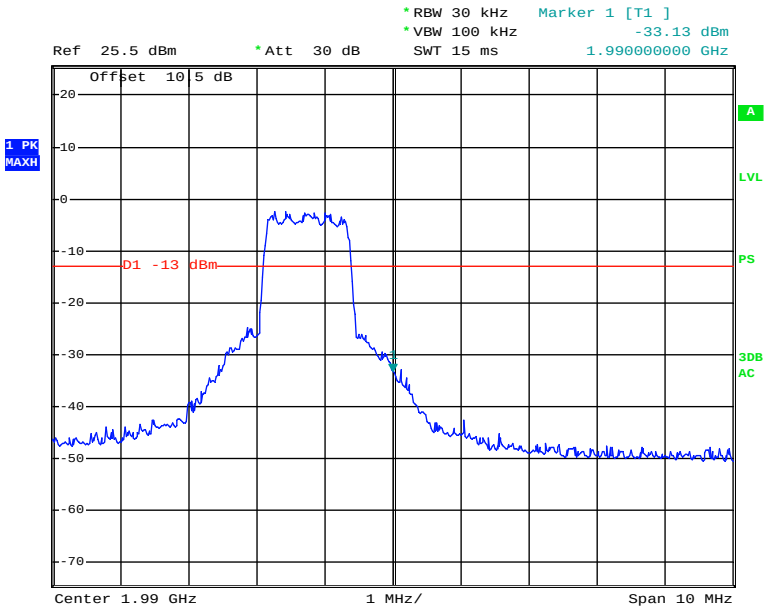
Date: 4.JAN.2012 07:19:10

Downlink, Left Bandage



Date: 4.JAN.2012 07:28:27

Downlink, Right Bandage



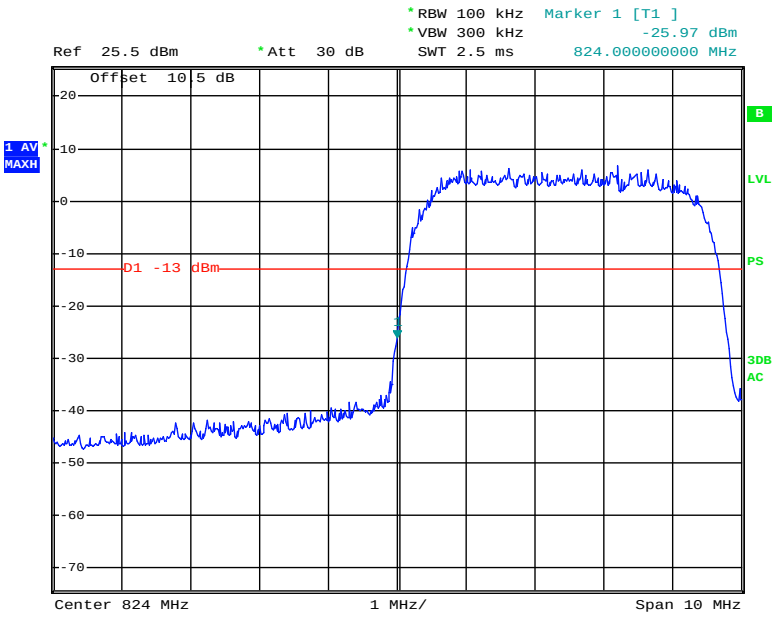
Date: 4.JAN.2012 07:27:24

WCDMA:

Mode	Frequency (MHz)	Emission (dBm)	＜Limit (dBm)
Cellular Band (Part 22H)			
Uplink (824-849 MHz)	824.00	-25.97	-13
	849.00	-25.11	-13
Downlink (869-894 MHz)	869.00	-15.39	-13
	894.00	-23.38	-13
PCS Band (Part 24E)			
Uplink (1850-1910 MHz)	1850.00	-29.09	-13
	1910.00	-29.46	-13
Downlink (1930-1990 MHz)	1930.00	-25.40	-13
	1990.00	-19.77	-13

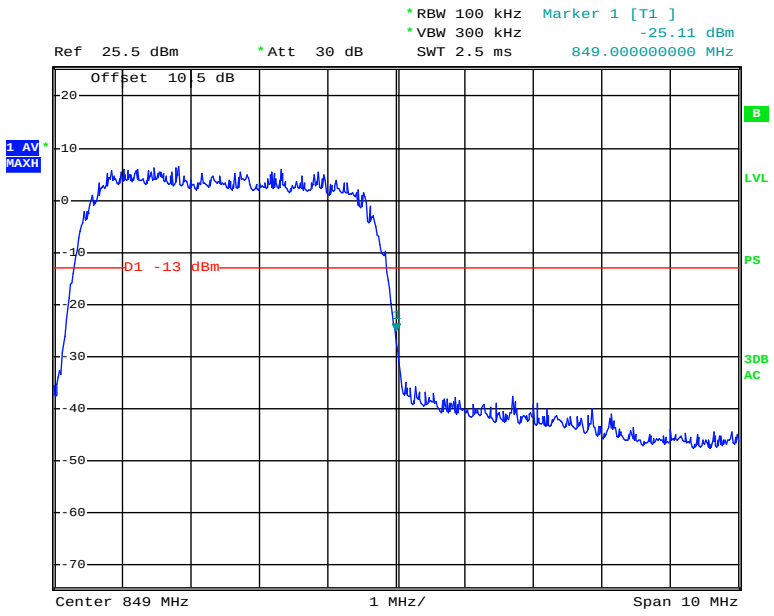
Cellular Band (Part 22H)

Uplink, Left Bandage



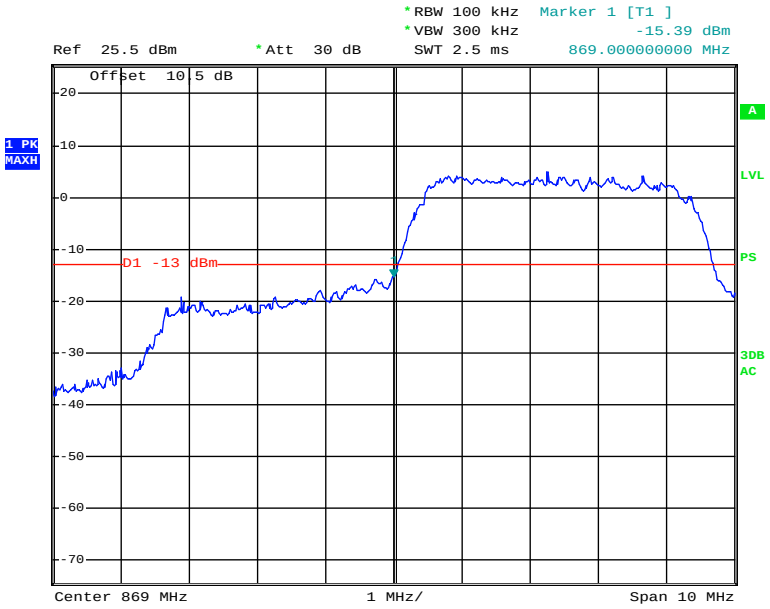
Date: 20.JAN.2012 10:03:58

Uplink, Right Bandage



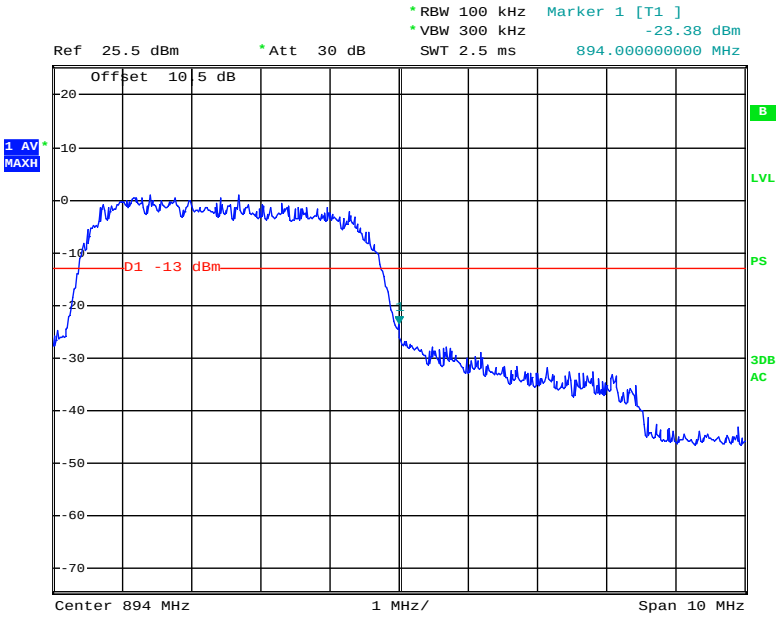
Date: 20.JAN.2012 10:04:34

Downlink, Left Bandage



Date: 22.FEB.2012 10:43:20

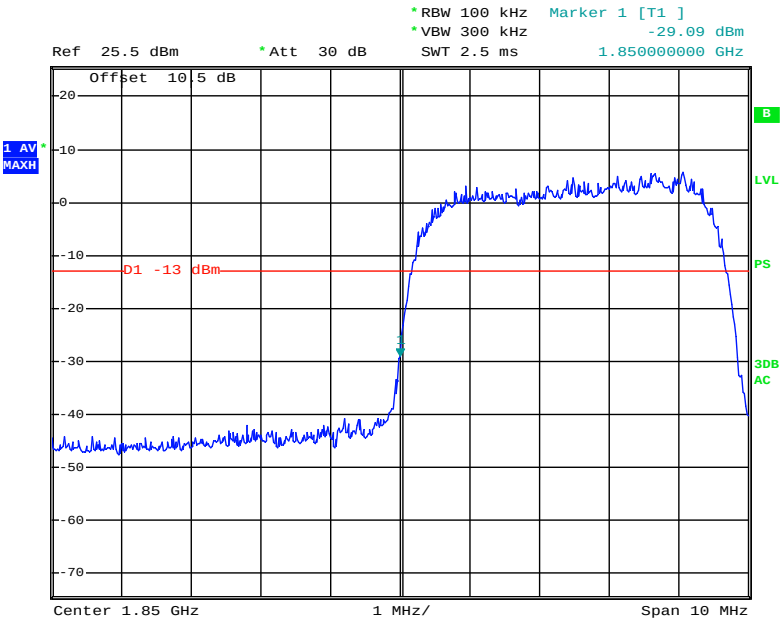
Downlink, Right Bandage



Date: 20.JAN.2012 10:08:59

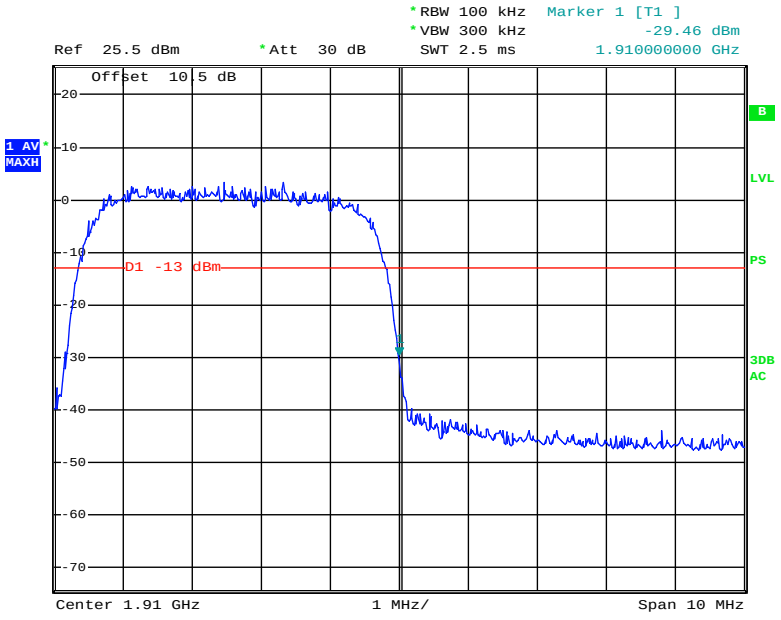
PCS Band (Part 24E)

Uplink, Left Bandage



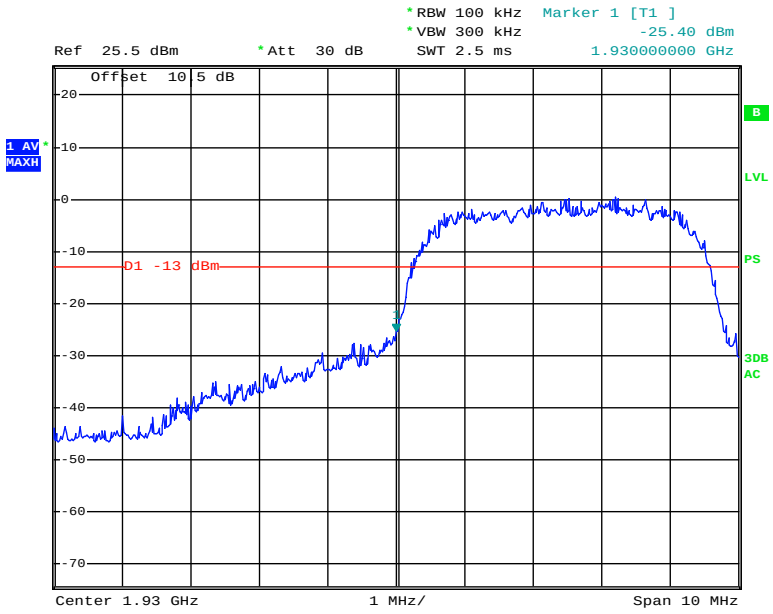
Date: 20.JAN.2012 10:06:05

Uplink, Right Bandage



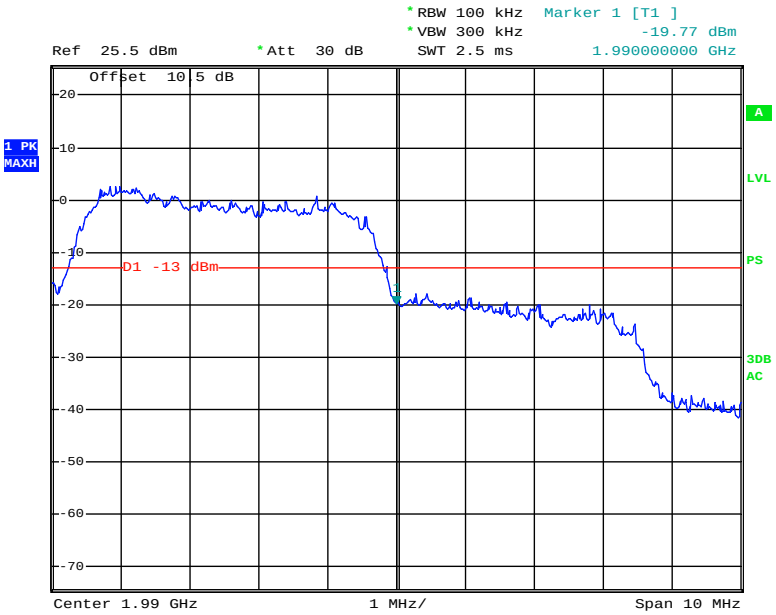
Date: 20.JAN.2012 10:05:32

Downlink, Left Bandage



Date: 20.JAN.2012 10:07:28

Downlink, Right Bandage



Date: 22.FEB.2012 10:46:00

******* END OF REPORT *******