



# InterLab®

## Final Report on

### Cinterion Wireless Module PH8-P

#### HW: Release 2, B2

#### SW: Revision 01.370

<b>Report Reference:</b>	MDE_CINTE_1107_FCCb	
	acc. Title 47 CFR chapter I part 22 subpart H	
<b>Date:</b>	September 22, 2011	
<b>Test Laboratory:</b>		
7Layers AG Borsigstr. 11 40880 Ratingen Germany		
Note: The following test results relate only to the devices specified in this document. This report shall not be reproduced in parts without the written approval of the test laboratory.		
7Layers AG Borsigstrasse 11 40880 Ratingen, Germany Phone: +49 (0) 2102 749 0 Fax: +49 (0) 2102 749 350 <a href="http://www.7Layers.com">www.7Layers.com</a>	Aufsichtsratsvorsitzender Chairman of the Supervisory Board: Markus Becker Vorstand Board: Dr. H.-J. Meckelburg	Registergericht registered in: Düsseldorf, HRB 44096 USt-IdNr VAT No.: DE 203159652 TAX No. 147/5869/0385





---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

## 1 Administrative Data

### 1.1 Project Data

*Project Responsible:* Mr. René Houx  
*Date Of Test Report:* 2011/09/22  
*Date of first test:* 2011/08/15  
*Date of last test:* 2011/08/20

### 1.2 Applicant Data

*Company Name:* Cinterion Wireless Modules GmbH

*Street:* Siemensdamm 50  
*City:* 13629 Berlin  
*Country:* Germany

*Contact Person:* Mr. Thorsten Liebig  
*Function:* Manager Approval  
*Phone:* +49 (30) 31102-8241  
*E-Mail:* thorsten.liebig@cinterion.com

### 1.3 Test Laboratory Data

The following list shows all places and laboratories involved for test result generation:

#### 7 layers DE

---

*Company Name :* 7 layers AG  
*Street :* Borsigstrasse 11  
*City :* 40880 Ratingen  
*Country :* Germany  
*Contact Person :* Mr. Michael Albert  
*Phone :* +49 2102 749 201  
*Fax :* +49 2102 749 444  
*E Mail :* michael.albert@7Layers.de

#### Laboratory Details

---

Lab ID	Identification	Responsible	Accreditation Info
Lab 1	Radiated Emissions	Mr. Robert Machulec Mr. Andreas Petz	DAkkS-Registration no. D-PL-12140-01-01
Lab 2	Radio Lab	Mr. Robert Machulec Mr. Andreas Petz	DAkkS-Registration no. D-PL-12140-01-01

### 1.4 Signature of the Testing Responsible

A handwritten signature in blue ink that reads "Machulec".

Robert Machulec  
responsible for tests performed in: Lab 1, Lab 2

## 1.5 Signature of the Accreditation Responsible

A handwritten signature in blue ink, appearing to read "B. Reth".

Accreditation scope responsible person  
responsible for Lab 1, Lab 2

## 2 Test Object Data

### 2.1 General OUT Description

The following section lists all OUTs (Object's Under Test) involved during testing.

#### OUT: PH8-P

Type / Model / Family:	Cinterion Wireless Module PH8-P HW: Release 2, B2 SW: Revision 01.370
Product Category:	Module
<b>Parameter List:</b>	
Parameter name	Value
<b>Parameter for Scope FCC_v2:</b>	
Antenna gain 1900 band	not specified (dBi)
Antenna gain 850 band	not specified (dBi)
Antenna gain GPS	not specified (dBi)
DC Power Supply	4.2 (V)
highest channel	251 (848.8MHz) for GSM850, 810 (1909.8MHz) for GSM1900, 4233 (846.6MHz) for FDD5, 9538 (1907.6MHz) for FDD2
lowest channel	128 (824.2MHz) for GSM850, 512 (1850.2MHz) for GSM1900, 4132 (826.4MHz) for FDD5, 9262 (1852.4MHz) for FDD2
mid channel	190 (836.6MHz) for GSM850, 661 (1880.0MHz) for GSM1900, 4183 (836.6MHz) for FDD5, 9400 (1880MHz) for FDD2



## 2.2 Detailed Description of OUT Samples

### Sample : b01

<i>OUT Identifier</i>	PH8-P		
<i>Sample Description</i>	sample #02		
<i>Serial No.</i>	IMEI: 004401080640028		
<i>HW Status</i>	Release 2, B2		
<i>SW Status</i>	Revision 01.370		
<i>Date of Receipt</i>	2011/08/05		
<i>Low Voltage</i>	3.3 V	<i>Low Temp.</i>	-10 °C
<i>High Voltage</i>	4.2 V	<i>High Temp.</i>	+55 °C
<i>Nominal Voltage</i>	4.2 V	<i>Normal Temp.</i>	+22 °C

## 2.3 OUT Features

### Features for OUT: PH8-P

Designation	Description	Allowed Values	Supported Value(s)
<b>Features for scope: FCC_v2</b>			
AC	The OUT is powered by or connected to AC Mains		
DC	The OUT is powered by or connected to DC Mains		
EDGE850	EUT supports EDGE in the band 824 MHz - 849 MHz		
EDGE1900	EUT supports EDGE in the band 1850 MHz - 1910 MHz		
FDD2	EUT supports UMTS FDD2 in the band 1850 MHz - 1910 MHz		
FDD5	EUT supports UMTS FDD5 in the band 824 MHz - 849 MHz		
GSM850	EUT supports GSM850 band 824MHz - 849MHz		
HSDPA-FDD2	EUT supports UMTS FDD2 HSDPA in the band 1850 MHz - 1910 MHz		
HSDPA-FDD5	EUT supports UMTS FDD5 HSDPA in the band 824 MHz - 849 MHz		
HSUPA-FDD2	EUT supports UMTS FDD2 HSUPA in the band 1850 MHz - 1910 MHz		
HSUPA-FDD5	EUT supports UMTS FDD5 HSUPA in the band 824 MHz - 849 MHz		
PantC	permanent fixed antenna connector, which may be built-in, designed as an indispensable part of the equipment		
PCS1900	EUT supports PCS1900 band 1850MHz - 1910MHz		



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

## 2.4 Auxiliary Equipment

AE No.	Type Designation	Serial No.	HW Status	SW Status	Description
AE 09	-	-	-	-	Direct RF coupler to SMA
AE 02	-	-	-	-	Flex cable
AE Ant1	-	-	-	-	GSM/UMTS antenna
AE Ant2	-	-	-	-	UMTS antenna
AE Ant3	ANN-MS-0-005 M827B	601657	-	-	GPS antenna
AE 01	DSB75_B1.1_0152	-	-	-	Evaluation board

## 2.5 Setups used for Testing

For each setup a relation is given to determine if and which samples and auxiliary equipment is used. The left side list all OUT samples and the right side lists all auxiliary equipment for the given setup.

Setup No.	List of OUT samples		List of auxiliary equipment	
	Sample No.	Sample Description	AE No.	AE Description

### B01\_direct (used for measurement using antenna port at the module)

Sample: b01	sample #02	AE 09	Direct RF coupler to SMA
		AE 02	Flex cable
		AE 01	Evaluation board

### B01\_rad (used for radiated measurement using external antennas)

Sample: b01	sample #02	AE 02	Flex cable
		AE Ant1	GSM/UMTS antenna
		AE Ant2	UMTS antenna
		AE Ant3	GPS antenna
		AE 01	Evaluation board

### B01\_RF1 (used for measurement at external RF connector RF1)

Sample: b01	sample #02	AE 02	Flex cable
		AE 01	Evaluation board

### 3 Results

#### 3.1 General

<b>Documentation of tested devices:</b>	Available at the test laboratory.
<b>Interpretation of the test results:</b>	The results of the inspection are described on the following pages, where 'Conformity' or 'Passed' means that the certification criteria were verified and that the tested device is conform to the applied standard.
	In cases where 'Declaration' is printed, the required documents are available in the manufacturers product documentation.
	In cases where 'not applicable' is printed, the test case requirements are not relevant to the specific equipment implementation.

#### 3.2 List of the Applicable Body

(Body for Scope: FCC\_v2)

<i>Designation</i>	<i>Description</i>
FCC47CFRChIPART22PUBLIC MOBILE SERVICES	Part 22, Subpart H - Cellular Radiotelephone Service

#### 3.3 List of Test Specification

<i>Test Specification:</i>	<b>FCC part 2 and 22</b>
<i>Version</i>	10-1-10 Edition
<i>Title:</i>	PART 2 - GENERAL RULES AND REGULATIONS PART 22 - PUBLIC MOBILE SERVICES

### 3.4 Summary

Test Case Identifier / Name Test (condition)	Result	Date of Test	Lab Ref.	Setup
<b>22.1 RF Power Output §2.1046, §22.913</b>				
22.1; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_1, Channel = 4132, Frequency = 826.4MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_1, Channel = 4183, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_1, Channel = 4233, Frequency = 846.6MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_2, Channel = 4132, Frequency = 826.4MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_2, Channel = 4183, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_2, Channel = 4233, Frequency = 846.6MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_3, Channel = 4132, Frequency = 826.4MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_3, Channel = 4183, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_3, Channel = 4233, Frequency = 846.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_4, Channel = 4132, Frequency = 826.4MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_4, Channel = 4183, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_4, Channel = 4233, Frequency = 846.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_1, Channel = 4132, Frequency = 826.4MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_1, Channel = 4183, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct

Test Case Identifier / Name Test (condition)	Result	acc. Title 47 CFR chapter I part 22 subpart H		
		Lab	Ref.	Setup
<b>22.1 RF Power Output §2.1046, §22.913</b>				
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_1, Channel = 4233, Frequency = 846.6MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_2, Channel = 4132, Frequency = 826.4MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_2, Channel = 4183, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_2, Channel = 4233, Frequency = 846.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_3, Channel = 4132, Frequency = 826.4MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_3, Channel = 4183, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_3, Channel = 4233, Frequency = 846.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_4, Channel = 4132, Frequency = 826.4MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_4, Channel = 4183, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_4, Channel = 4233, Frequency = 846.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_5, Channel = 4132, Frequency = 826.4MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_5, Channel = 4183, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_5, Channel = 4233, Frequency = 846.6MHz, Method = conducted	Passed	2011/08/20	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4132, Frequency = 826.4MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4183, Frequency = 836.6MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
22.1; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4233, Frequency = 846.6MHz, Method = conducted	Passed	2011/08/19	Lab 2	B01_direct
<b>22.2 Frequency stability §2.1055</b>				
22.2; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_RF1
22.2; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_RF1
22.2; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_RF1
22.2; Frequency Band = FDD5, Mode = HSUPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_RF1
22.2; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_RF1



---

Reference: MDE\_CINTE\_1107\_FCCb

<i>Test Case Identifier / Name</i>		acc. Title 47 CFR chapter I part 22 subpart H			
<i>Test (condition)</i>	<i>Result</i>	<i>Date of Test</i>	<i>Lab</i>	<i>Ref.</i>	<i>Setup</i>
<b>22.3 Spurious emissions at antenna terminals §2.1051, §22.917</b>					
22.3; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz,	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.3; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct	



---

Reference: MDE\_CINTE\_1107\_FCCb

<i>Test Case Identifier / Name</i>		acc. Title 47 CFR chapter I part 22 subpart H			
<i>Test (condition)</i>	<i>Result</i>	<i>Date of Test</i>	<i>Lab</i>	<i>Ref.</i>	<i>Setup</i>
<b>22.4 Field strength of spurious radiation §2.1053, §22.917</b>					
22.4; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/17	Lab 1	B01_rad	
22.4; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/17	Lab 1	B01_rad	
22.4; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/17	Lab 1	B01_rad	
22.4; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/17	Lab 1	B01_rad	
22.4; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/17	Lab 1	B01_rad	
22.4; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/17	Lab 1	B01_rad	
22.4; Frequency Band = 850, Mode = HSDPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/16	Lab 1	B01_rad	
22.4; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/16	Lab 1	B01_rad	
22.4; Frequency Band = FDD5, Mode = HSDPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/16	Lab 1	B01_rad	
22.4; Frequency Band = FDD5, Mode = HSUPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/15	Lab 1	B01_rad	
22.4; Frequency Band = FDD5, Mode = HSUPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/15	Lab 1	B01_rad	
22.4; Frequency Band = FDD5, Mode = HSUPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/15	Lab 1	B01_rad	
22.4; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/16	Lab 1	B01_rad	
22.4; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/16	Lab 1	B01_rad	
22.4; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/16	Lab 1	B01_rad	



---

Reference: MDE\_CINTE\_1107\_FCCb

<i>Test Case Identifier / Name</i>		acc. Title 47 CFR chapter I part 22 subpart H			
<i>Test (condition)</i>	<i>Result</i>	<i>Date of Test</i>	<i>Lab</i>	<i>Ref.</i>	<i>Setup</i>
<b>22.5 Emission and Occupied Bandwidth §2.1049, §22.917</b>					
22.5; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = FDD5, Mode = HSDPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = FDD5, Mode = HSDPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = FDD5, Mode = HSUPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = FDD5, Mode = HSUPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = FDD5, Mode = HSUPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct	
22.5; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct	



---

Reference: MDE\_CINTE\_1107\_FCCb

Test Case Identifier / Name Test (condition)	Result	acc. Title 47 CFR chapter I part 22 subpart H		
		Lab	Ref.	Setup
<b>22.6 Band edge compliance §2.1053, §22.917</b>				
22.6; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = HSDPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = HSDPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = HSUPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = HSUPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

### 3.5 Detailed Results

#### 3.5.1 22.1 RF Power Output §2.1046, §22.913

**Test: 22.1; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz, Method = conducted**

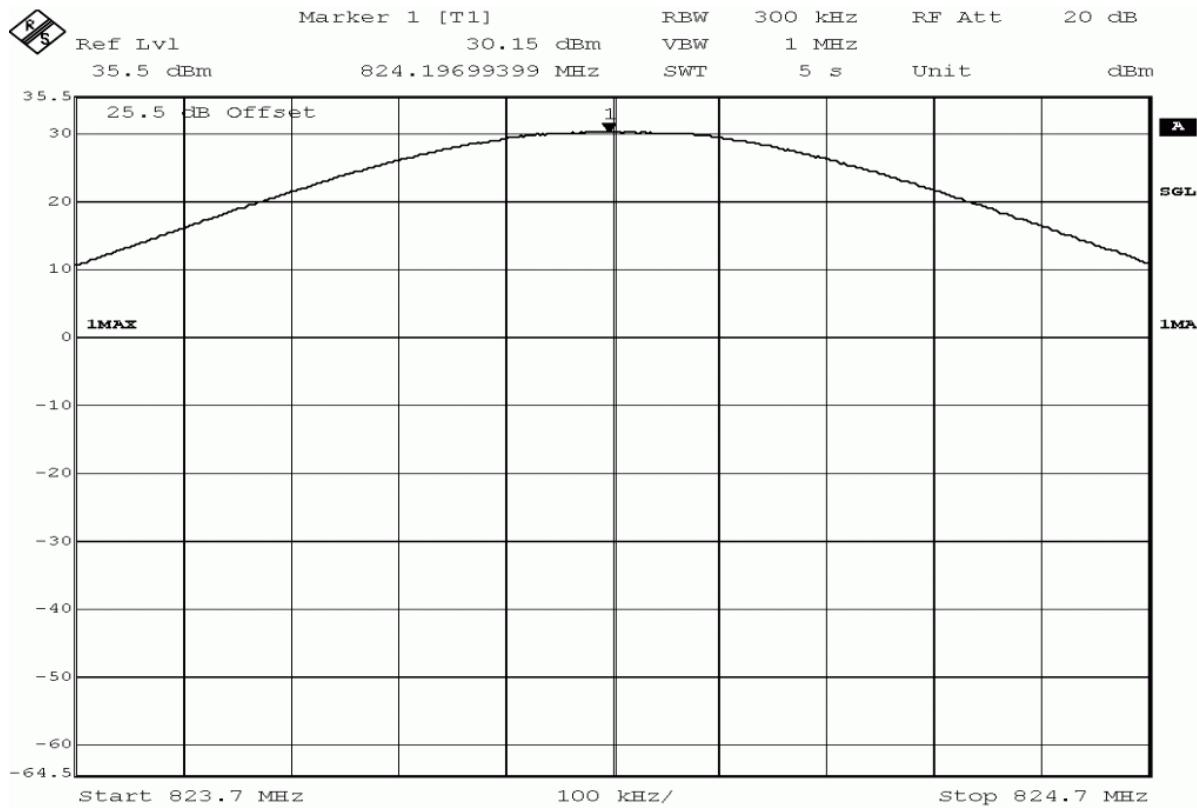
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 20:10

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, EDGE850, output power,  
 channel 128 (824.2MHz)  
 Date: 19.AUG.2011 20:12:00



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	300	30.15	passed
average	maxhold	300	26.37	passed
rms	maxhold	300	27.03	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.44 dBi

**Test: 22.1; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz, Method = conducted**

*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 20:11

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

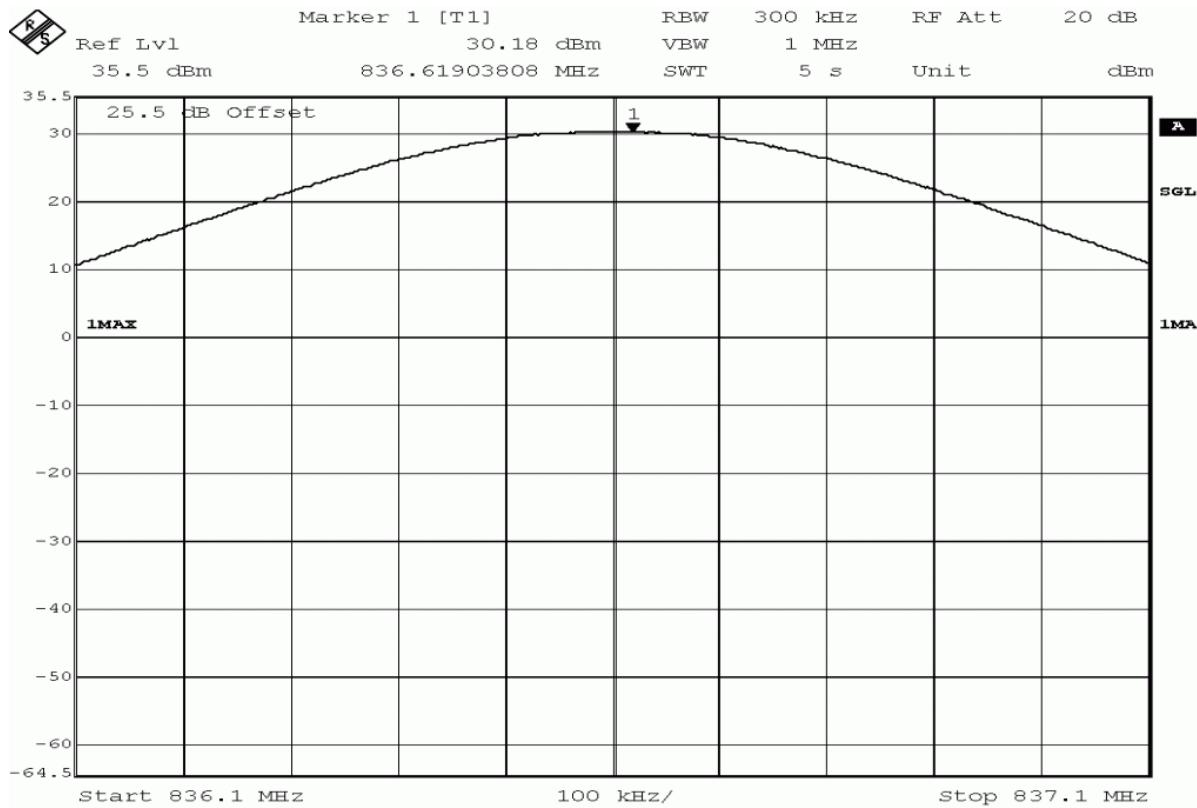
*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Detailed Results:**



Title: output power measurement  
Comment A: CZ600, EDGE850, output power,  
channel 190 (836.6MHz)  
Date: 19.AUG.2011 20:12:51



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	300	30.18	passed
average	maxhold	300	26.85	passed
rms	maxhold	300	27.00	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.41 dBi

**Test: 22.1; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz, Method = conducted**

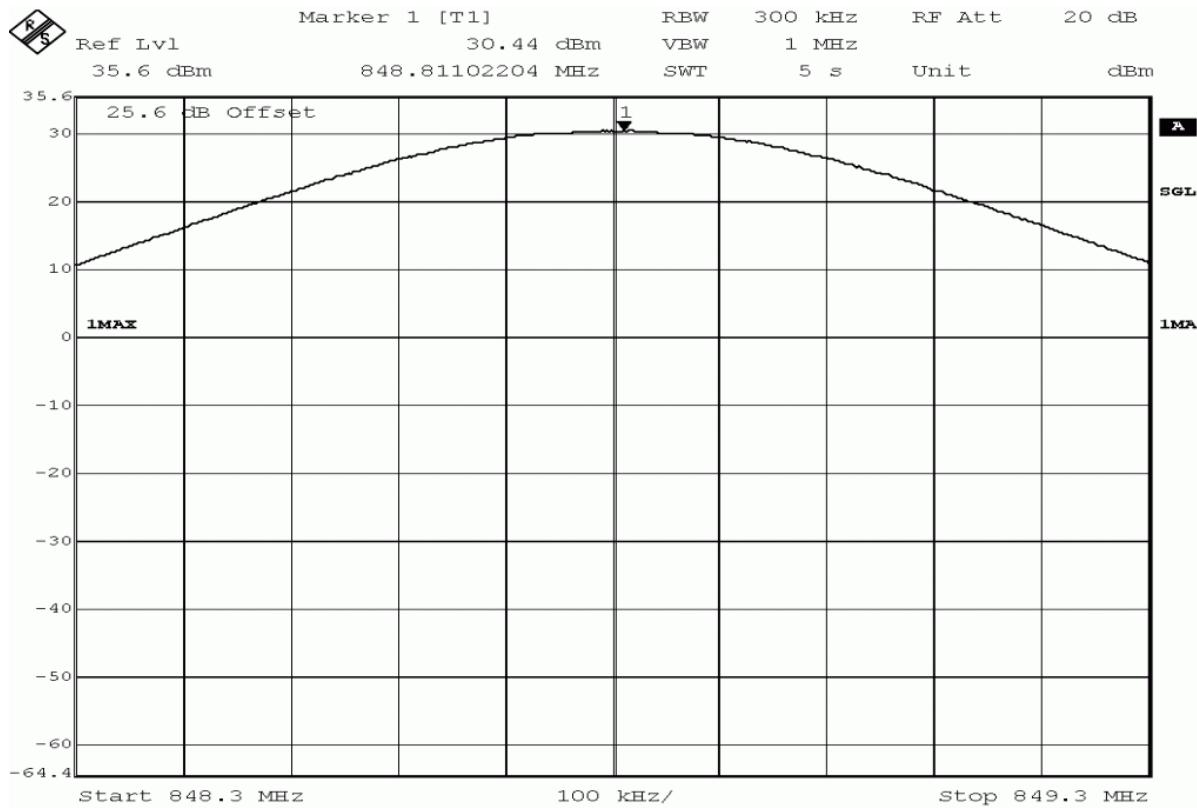
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 20:26

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, EDGE850, output power,  
 channel 251 (848.8MHz)  
 Date: 19.AUG.2011 20:27:43



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	300	30.44	passed
average	maxhold	300	26.80	passed
rms	maxhold	300	27.07	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.15 dBi

**Test: 22.1; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz, Method = conducted**

*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 20:54

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

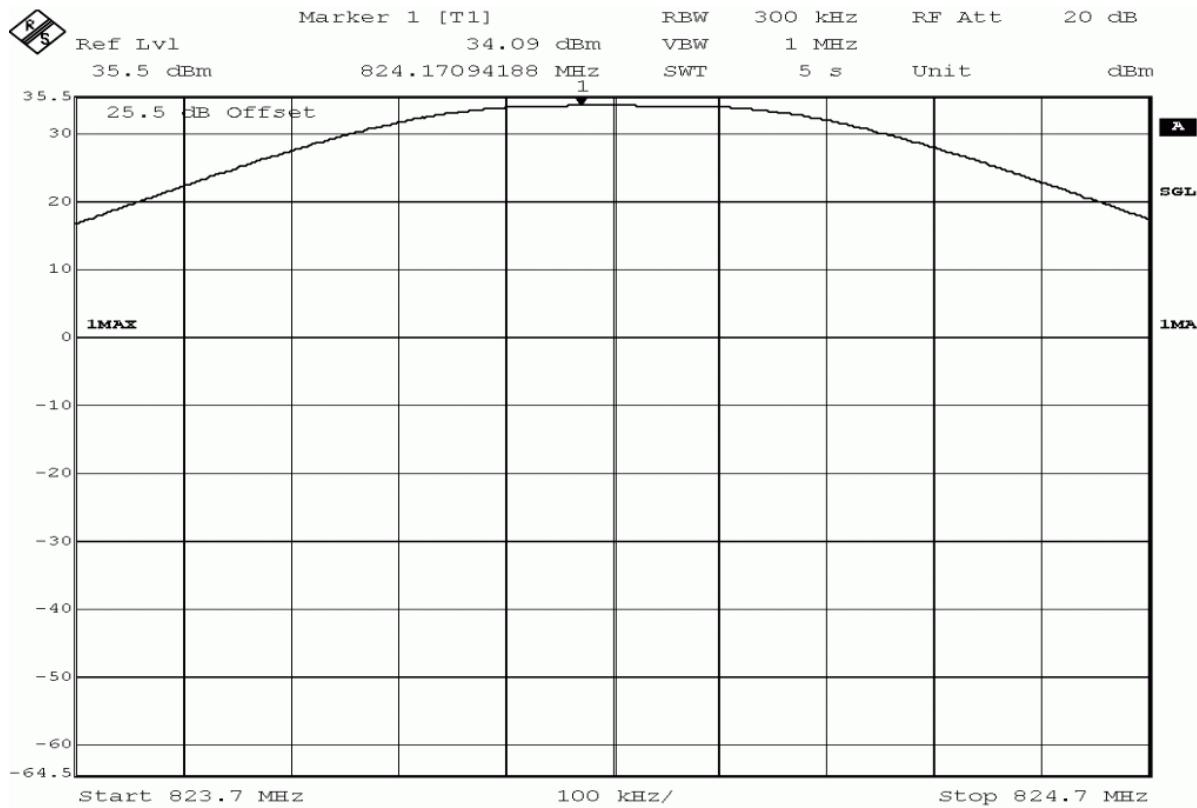
*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Detailed Results:**



Title: output power measurement  
Comment A: CZ600, GSM850, output power, channel 128,  
(824.2MHz)  
Date: 19.AUG.2011 20:55:56



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	300	34.09	passed
average	maxhold	300	33.52	passed
rms	maxhold	300	33.52	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

6.50 dBi

**Test: 22.1; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz, Method = conducted**

*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 20:40

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

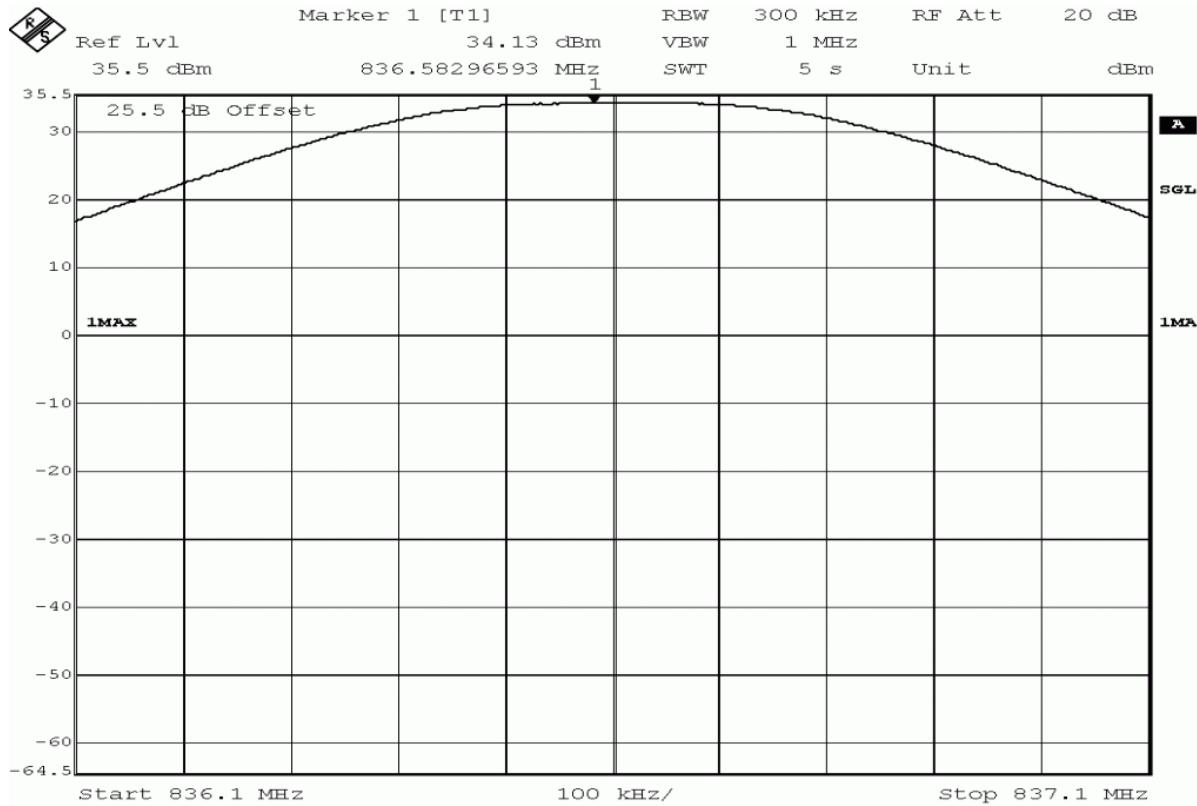
*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Detailed Results:**



Title: output power measurement  
Comment A: CZ600, GSM850, output power, channel 190,  
(836.6MHz)  
Date: 19.AUG.2011 20:42:28



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	300	34.13	passed
average	maxhold	300	33.59	passed
rms	maxhold	300	33.55	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

6.46 dBi

**Test: 22.1; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz, Method = conducted**

*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 21:21

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

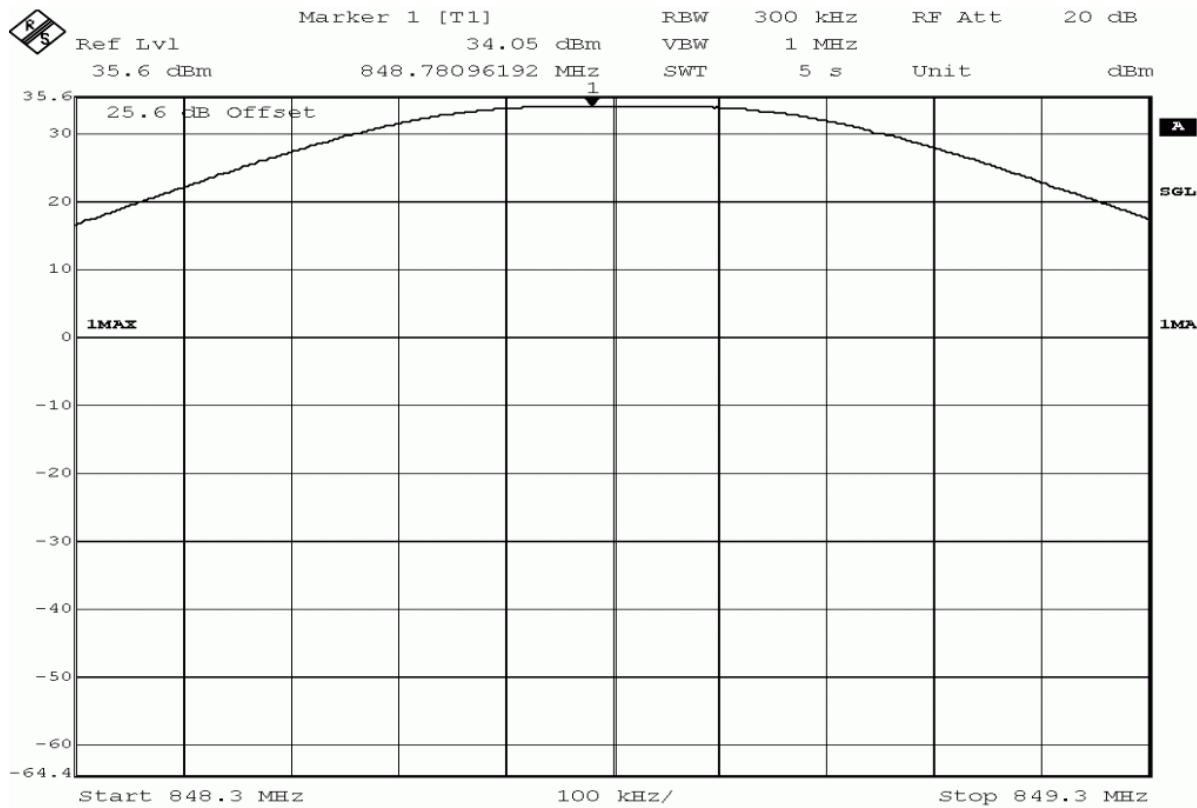
*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Detailed Results:**



Title: output power measurement  
Comment A: CZ600, GSM850, output power, channel 251,  
(848.8MHz)  
Date: 19.AUG.2011 21:22:39



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	300	34.05	passed
average	maxhold	300	33.47	passed
rms	maxhold	300	33.49	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

6.54 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_1, Channel = 4132, Frequency = 826.4MHz, Method = conducted**

*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 22:39

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

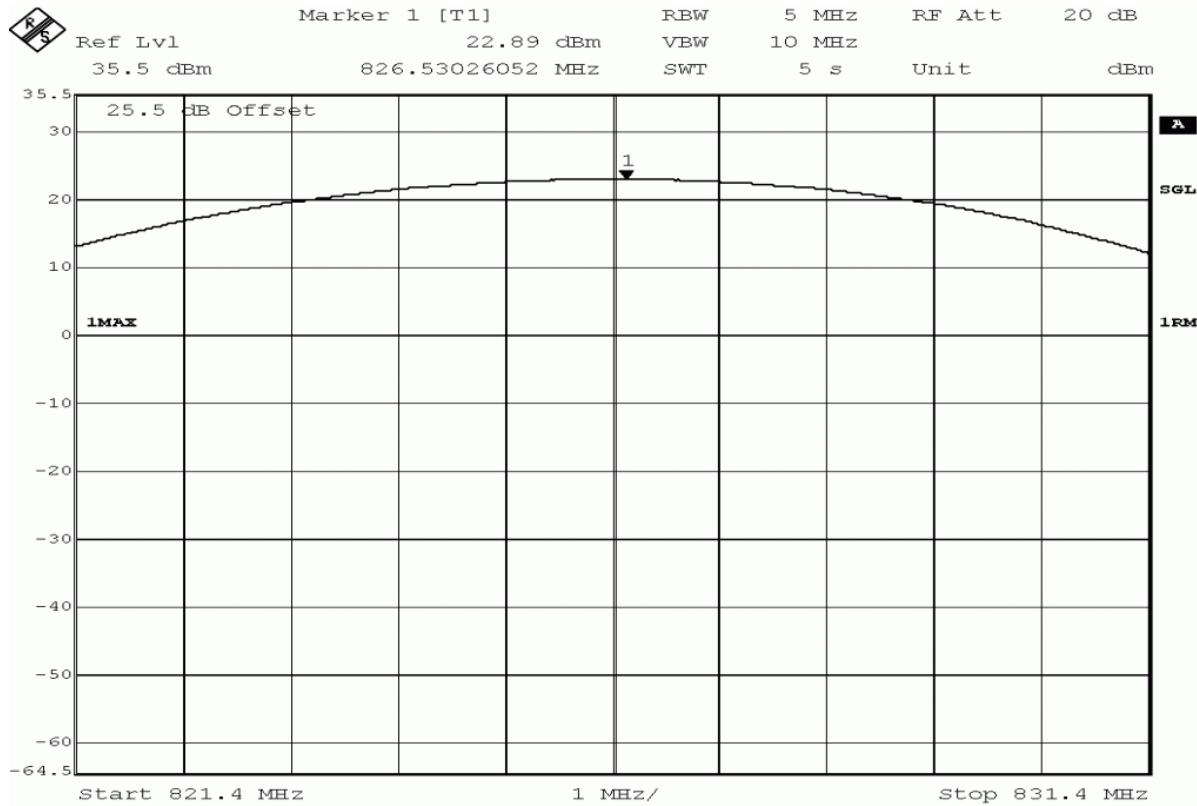
*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Detailed Results:**





---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	28.60	passed
average	maxhold	5000	22.70	passed
rms	maxhold	5000	22.89	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

11.99 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_1, Channel = 4183, Frequency = 836.6MHz, Method = conducted**

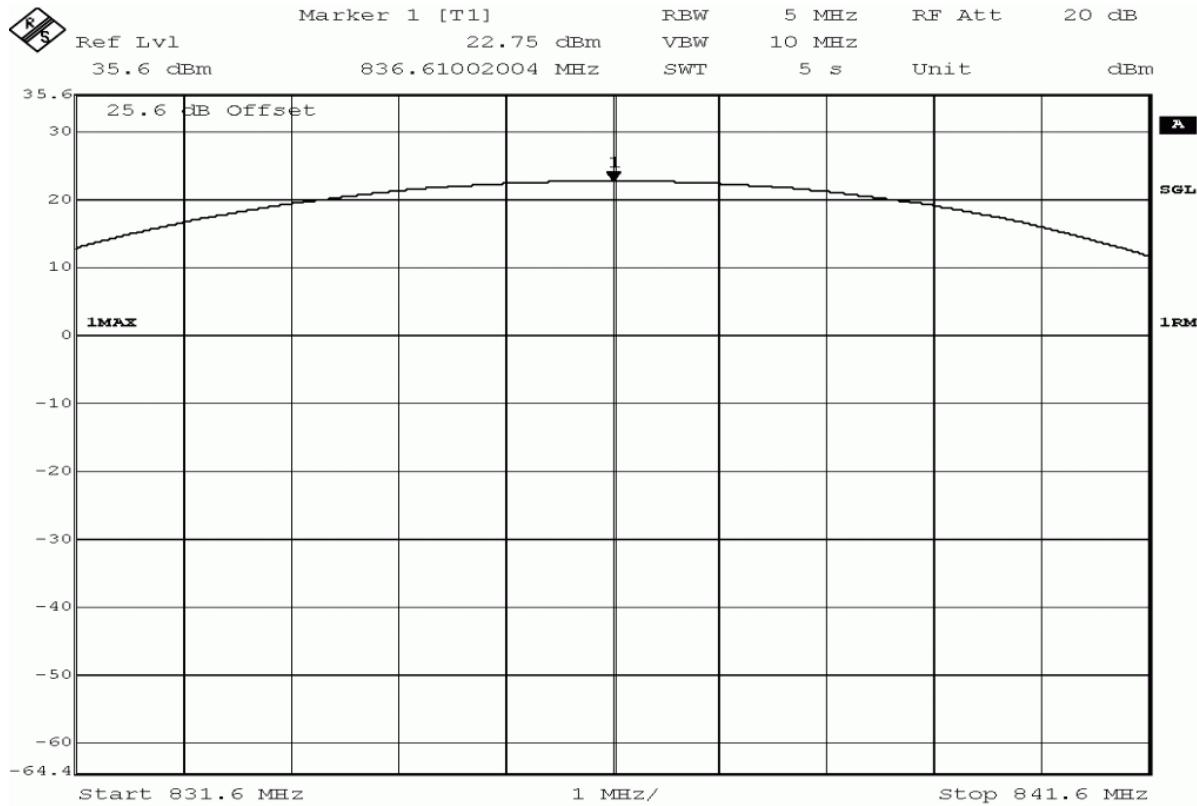
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 23:08

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 1 HSDPA FDD V, output power,  
 channel 4183 (836.6MHz)  
 Date: 19.AUG.2011 23:10:24



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.60	passed
average	maxhold	5000	22.50	passed
rms	maxhold	5000	22.75	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.99 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_1, Channel = 4233, Frequency = 846.6MHz, Method = conducted**

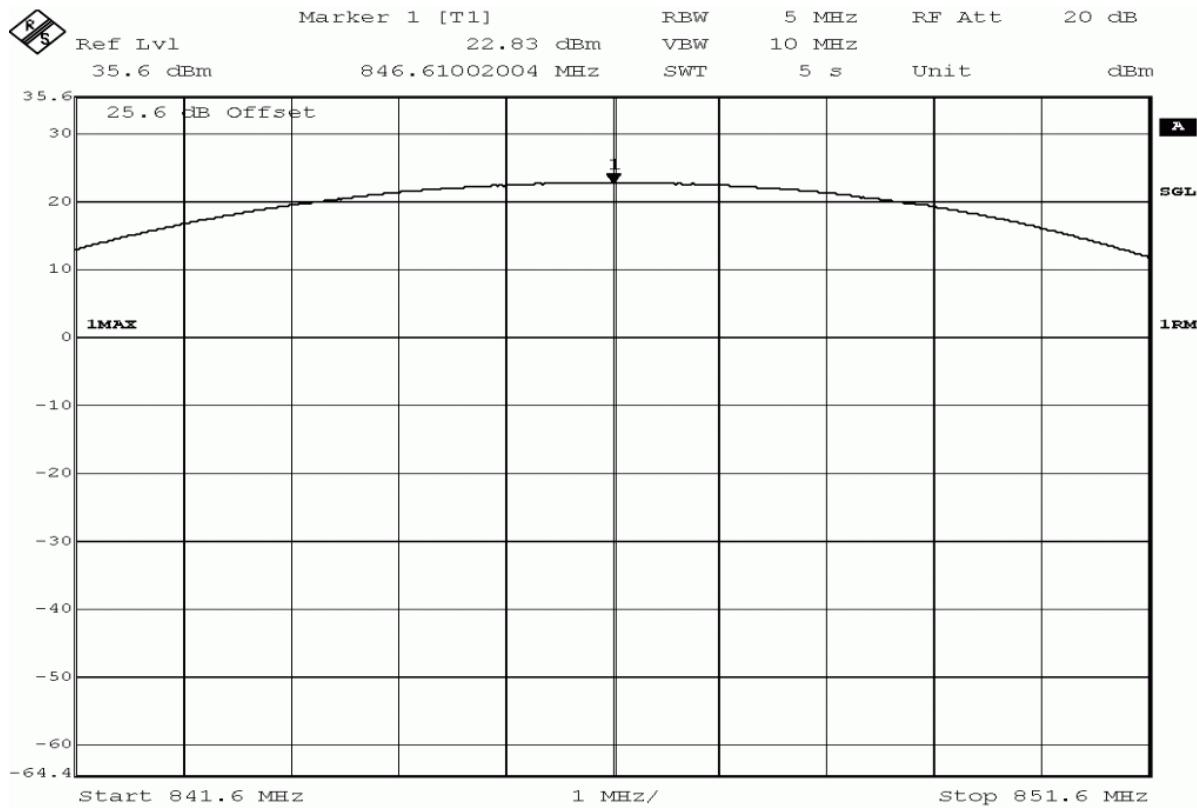
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 23:15

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 1 HSDPA FDD V, output power,  
 channel 4233 (846.6MHz)  
 Date: 19.AUG.2011 23:17:17



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	28.81	passed
average	maxhold	5000	22.59	passed
rms	maxhold	5000	22.83	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

11.78 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_2, Channel = 4132, Frequency = 826.4MHz, Method = conducted**

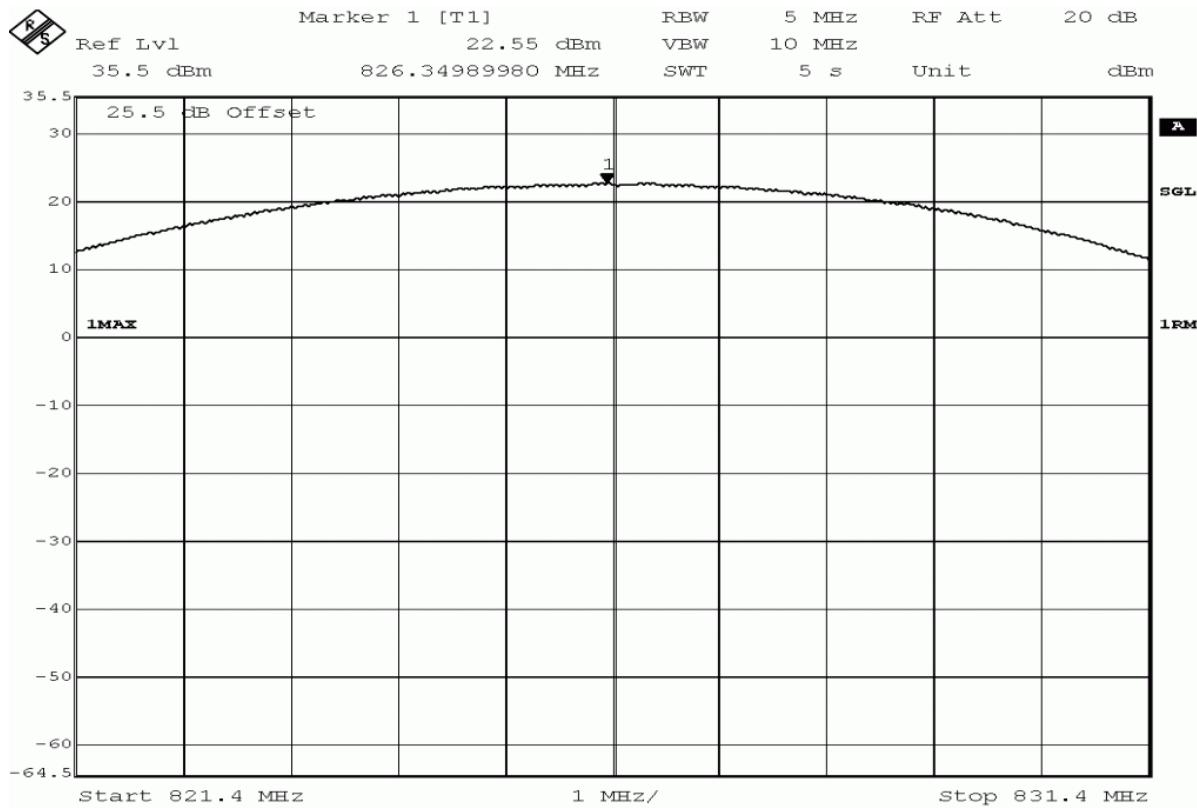
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 23:57

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 2 HSDPA FDD V, output power,  
 channel 4132 (826.4MHz)  
 Date: 19.AUG.2011 23:58:58



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	30.00	passed
average	maxhold	5000	21.98	passed
rms	maxhold	5000	22.55	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.59 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_2, Channel = 4183, Frequency = 836.6MHz, Method = conducted**

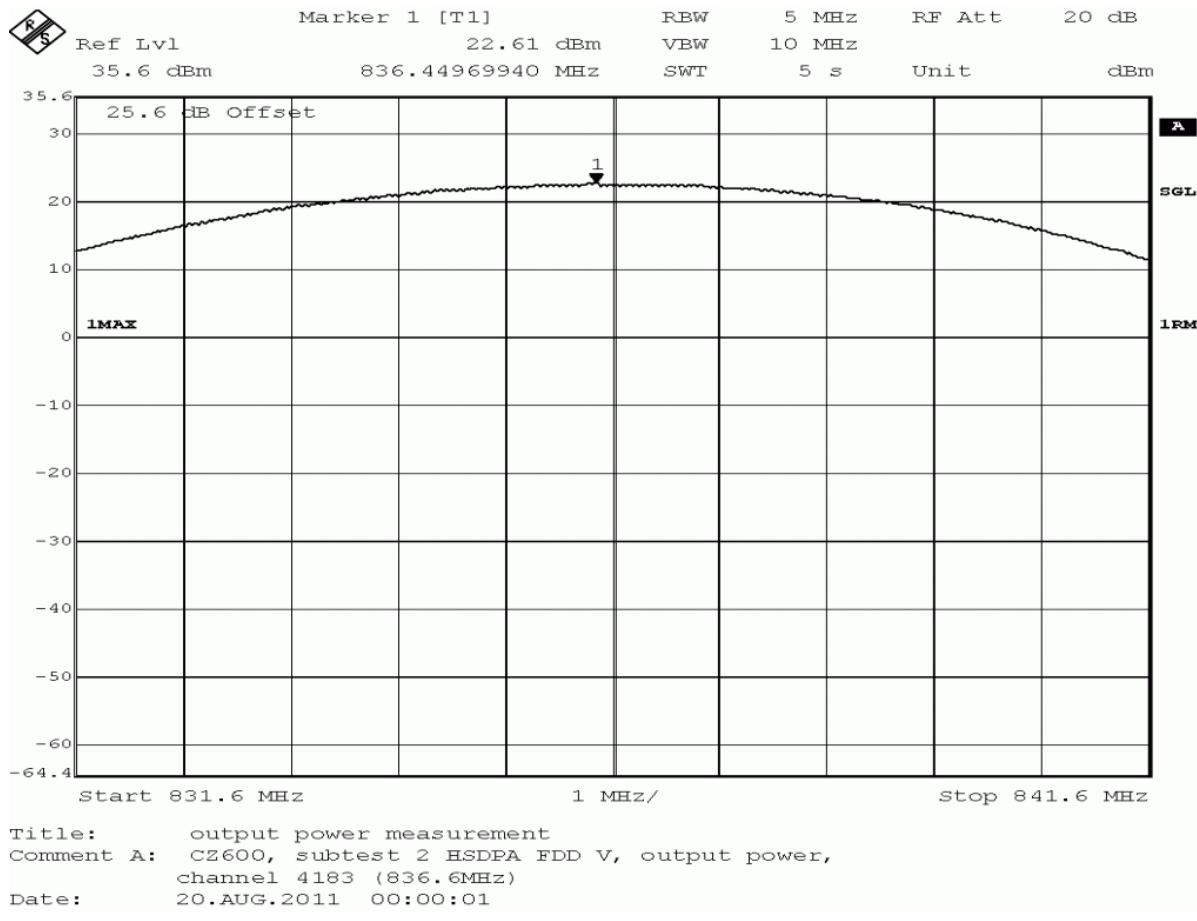
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 23:58

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**




---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	30.50	passed
average	maxhold	5000	21.91	passed
rms	maxhold	5000	22.61	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.09 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_2, Channel = 4233, Frequency = 846.6MHz, Method = conducted**

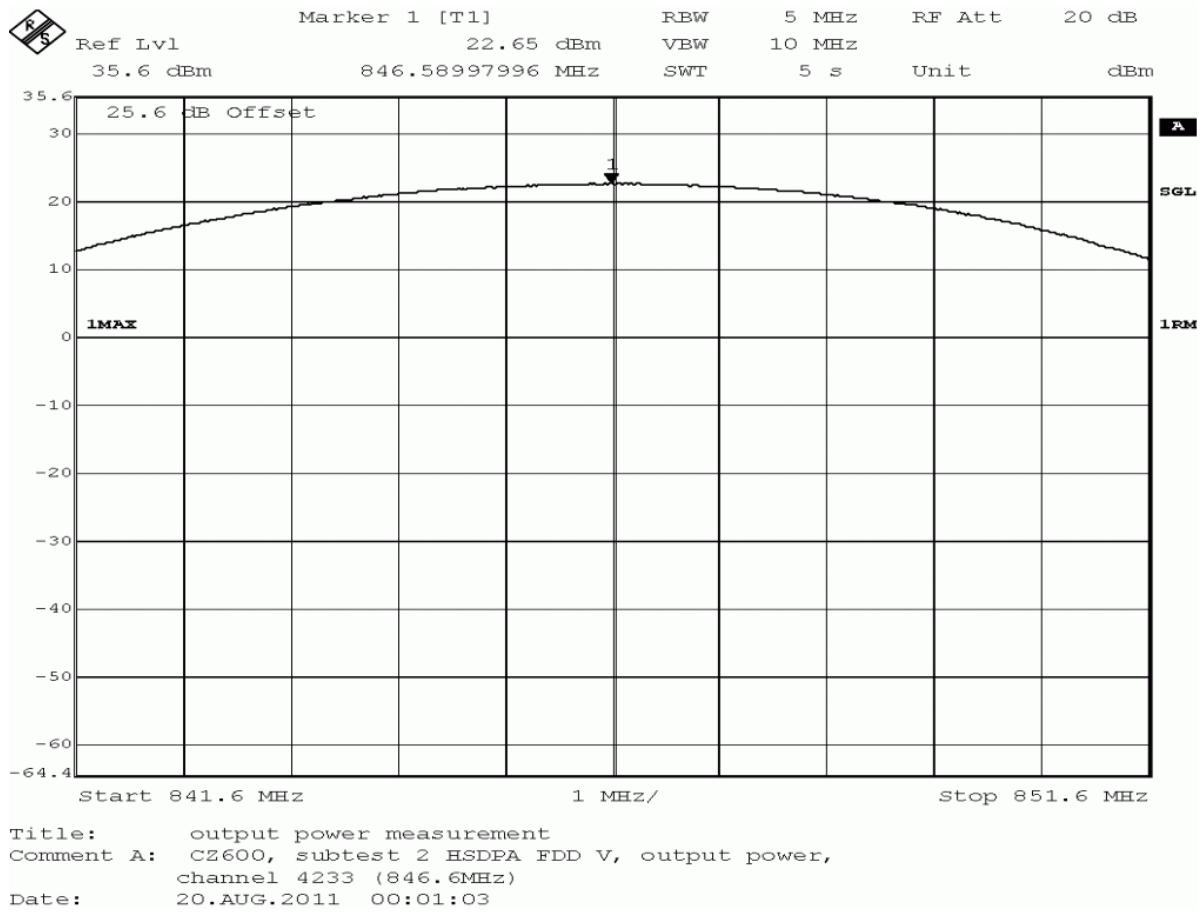
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 23:59

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**




---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	30.50	passed
average	maxhold	5000	21.97	passed
rms	maxhold	5000	22.65	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.09 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_3, Channel = 4132, Frequency = 826.4MHz, Method = conducted**

*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:00

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

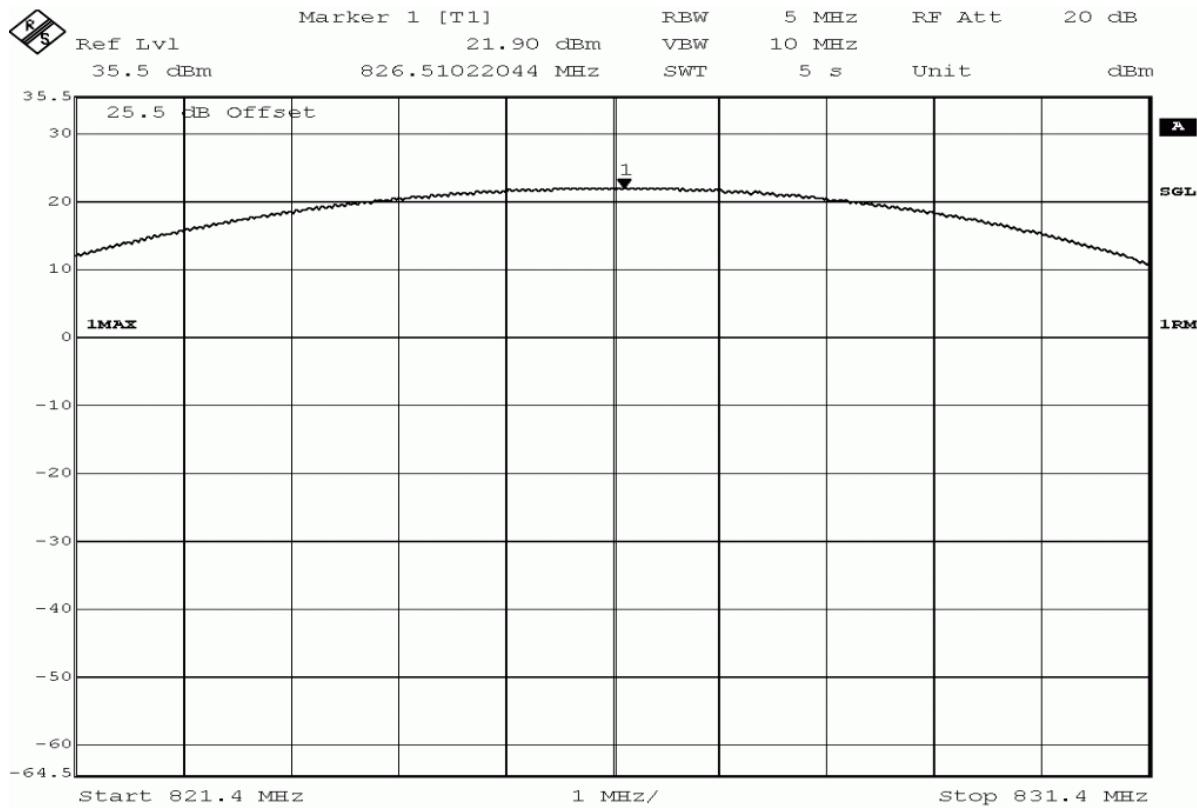
*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Detailed Results:**



Title: output power measurement  
Comment A: CZ600, subtest 3 HSDPA FDD V, output power,  
channel 4132 (826.4MHz)  
Date: 20.AUG.2011 00:02:52



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.63	passed
average	maxhold	5000	20.97	passed
rms	maxhold	5000	21.90	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.96 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_3, Channel = 4183, Frequency = 836.6MHz, Method = conducted**

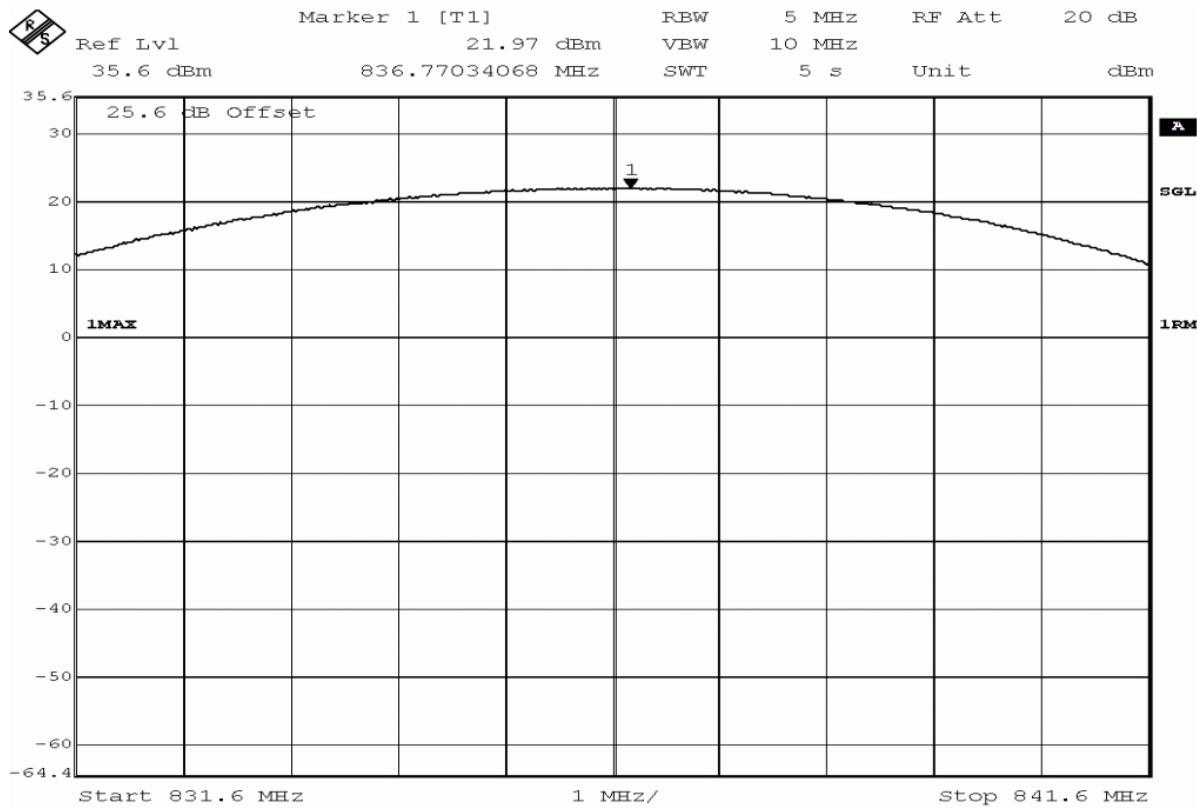
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:01

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 3 HSDPA FDD V, output power,  
 channel 4183 (836.6MHz)  
 Date: 20.AUG.2011 00:03:53



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.32	passed
average	maxhold	5000	21.01	passed
rms	maxhold	5000	21.97	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

11.27 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_3, Channel = 4233, Frequency = 846.6MHz, Method = conducted**

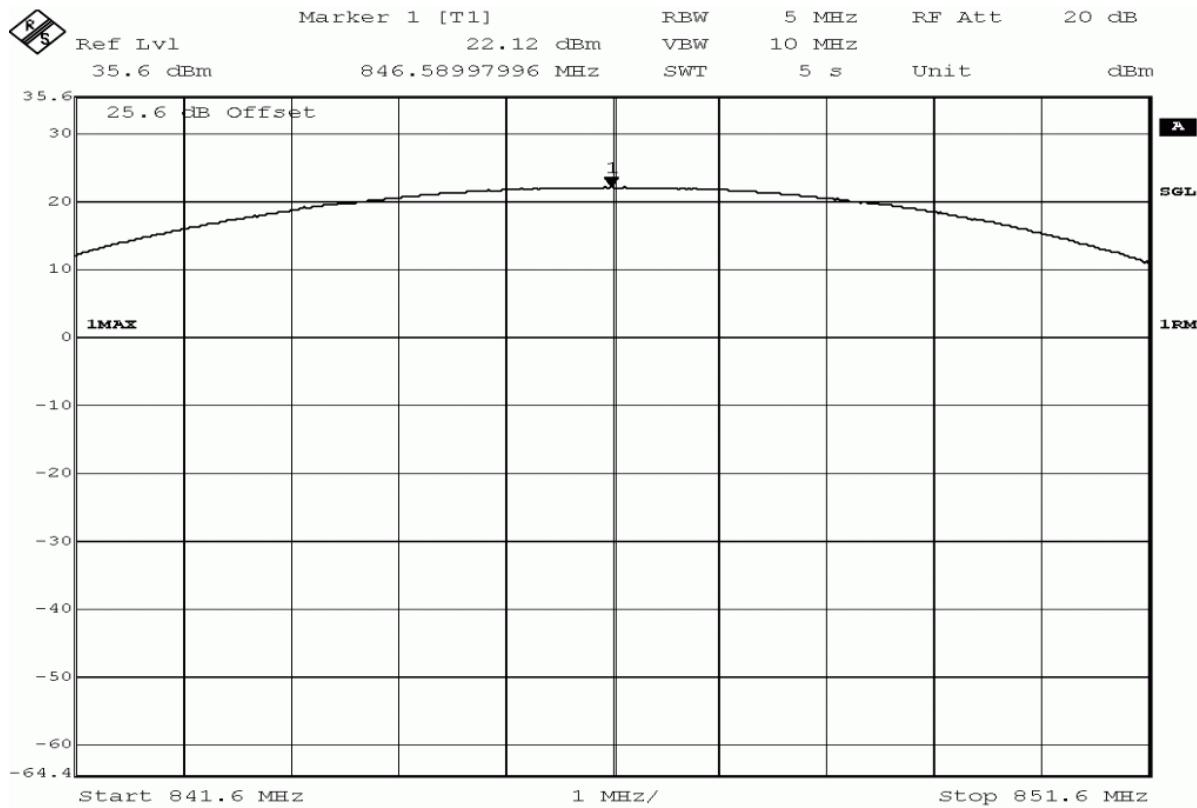
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:04

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 3 HSDPA FDD V, output power,  
 channel 4233 (846.6MHz)  
 Date: 20.AUG.2011 00:06:50



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.81	passed
average	maxhold	5000	21.10	passed
rms	maxhold	5000	22.12	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.78 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_4, Channel = 4132, Frequency = 826.4MHz, Method = conducted**

*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:06

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

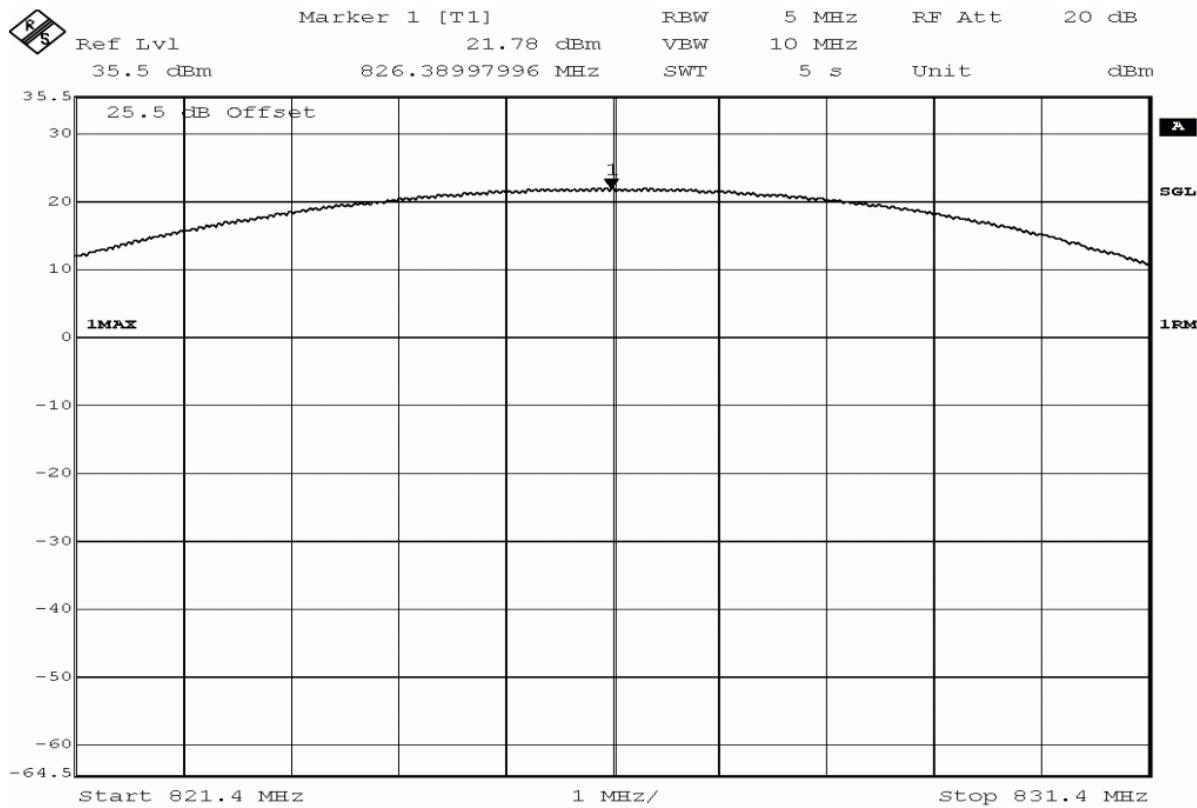
*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Detailed Results:**



Title: output power measurement  
Comment A: CZ600, subtest 4 HSDPA FDD V, output power,  
channel channel 4132 (826.4MHz)  
Date: 20.AUG.2011 00:08:34



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.63	passed
average	maxhold	5000	20.84	passed
rms	maxhold	5000	21.78	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.96 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_4, Channel = 4183, Frequency = 836.6MHz, Method = conducted**

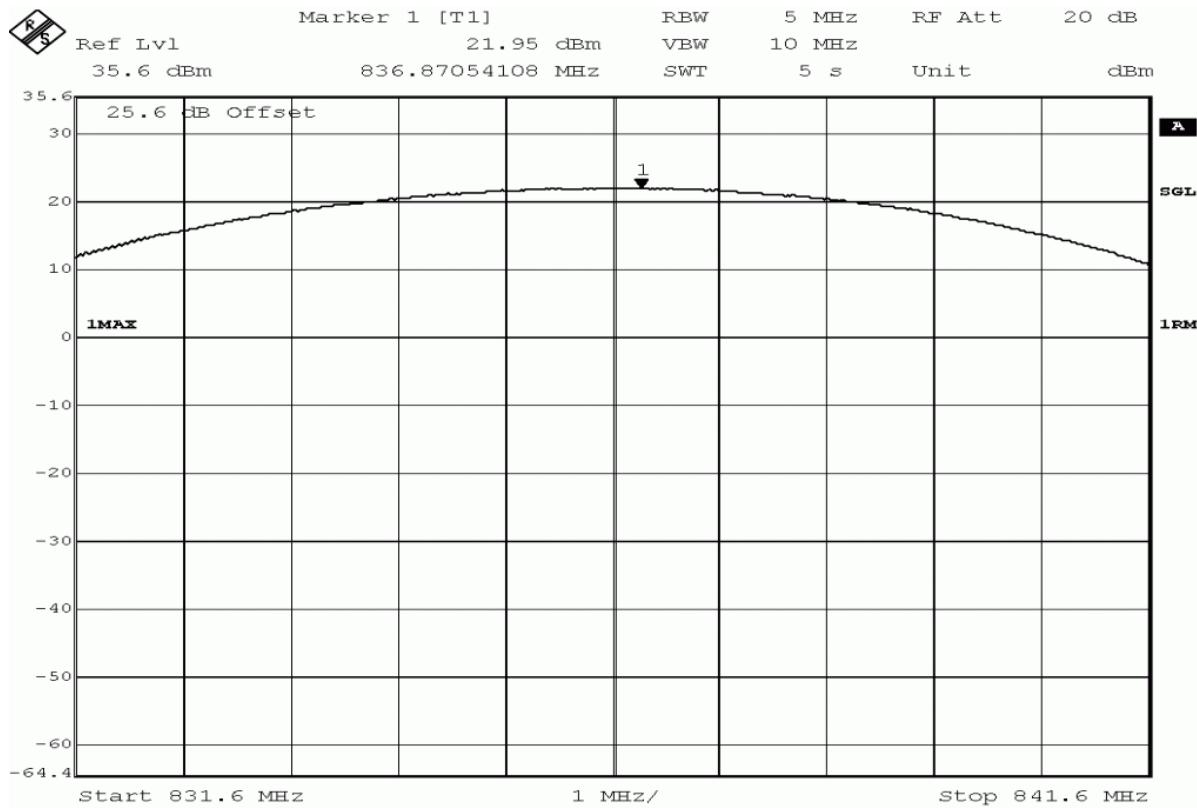
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:07

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 4 HSDPA FDD V, output power,  
 channel 4183 (836.6MHz)  
 Date: 20.AUG.2011 00:09:51



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.93	passed
average	maxhold	5000	20.94	passed
rms	maxhold	5000	21.95	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.66 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSDPA\_subtest\_4, Channel = 4233, Frequency = 846.6MHz, Method = conducted**

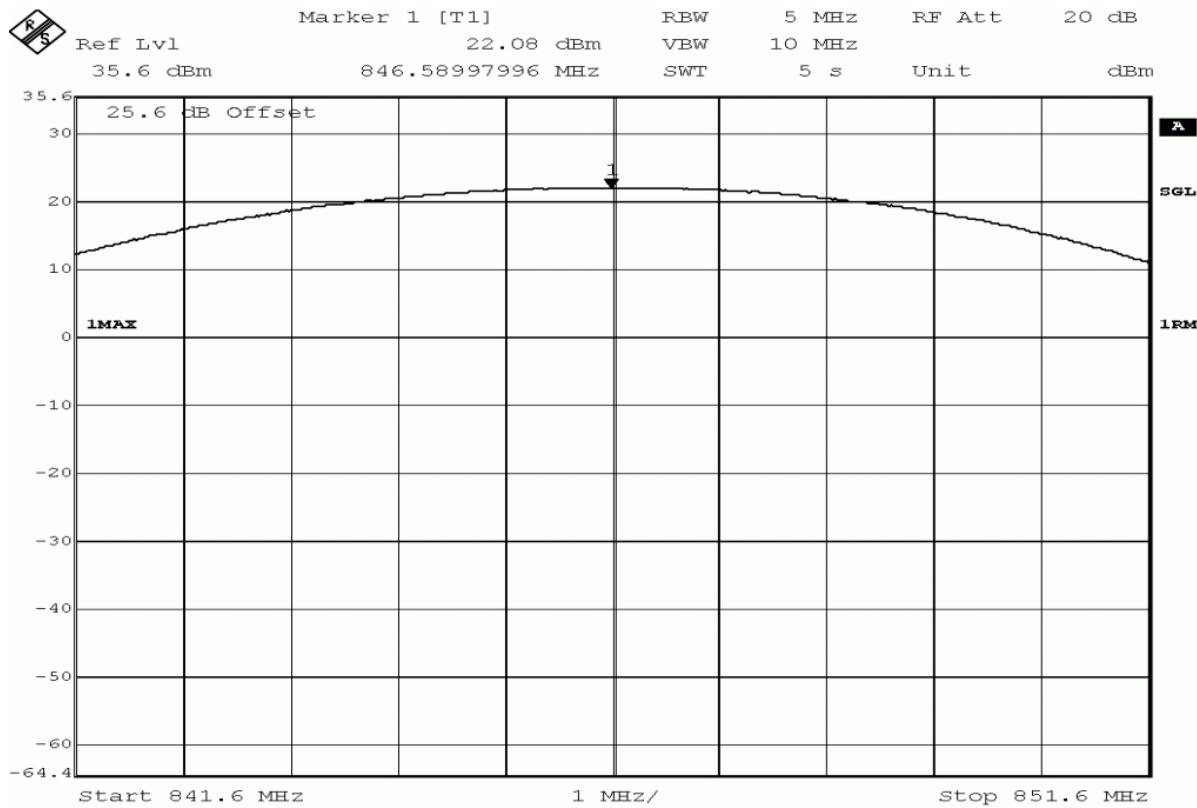
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:08

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 4 HSDPA FDD V, output power,  
 channel 4233 (846.6MHz)  
 Date: 20.AUG.2011 00:10:49



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.81	passed
average	maxhold	5000	20.98	passed
rms	maxhold	5000	22.08	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.78 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_1, Channel = 4132, Frequency = 826.4MHz, Method = conducted**

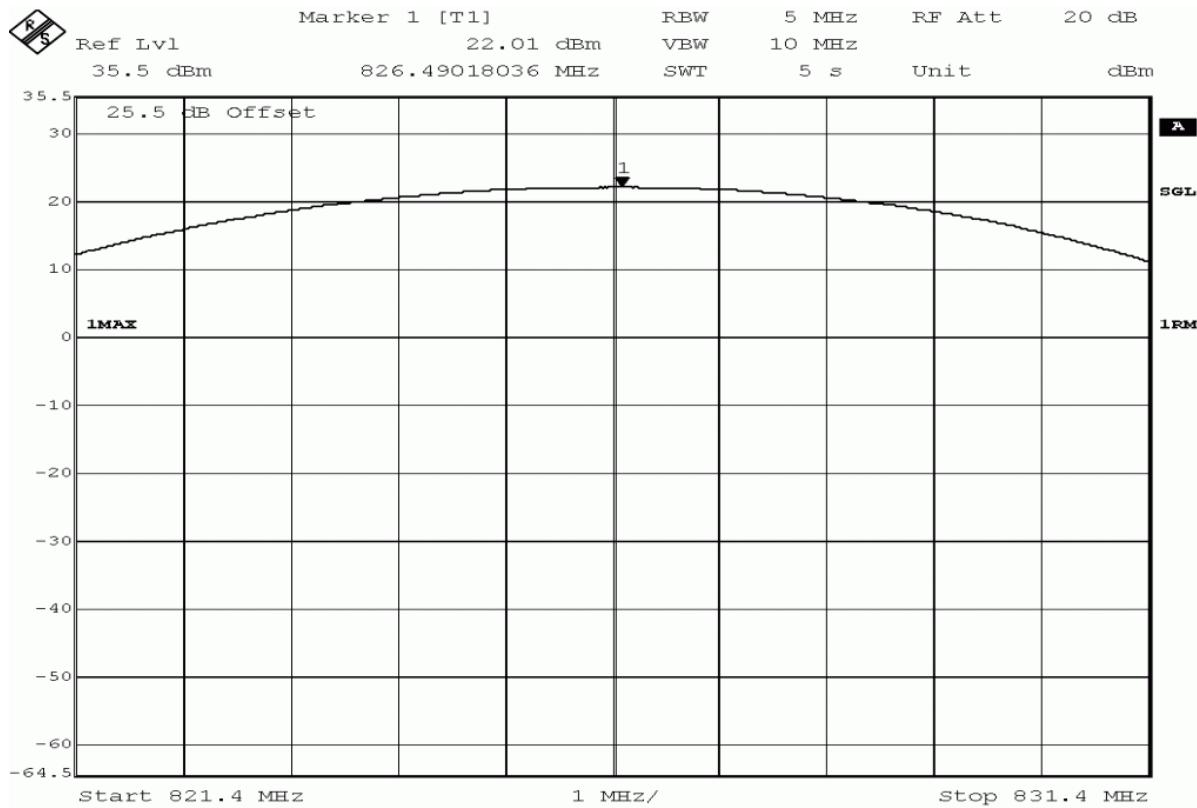
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 23:28

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 1 HSUPA FDD V, output power,  
 channel 4132 (826.4MHz)  
 Date: 19.AUG.2011 23:30:49



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.50	passed
average	maxhold	5000	21.56	passed
rms	maxhold	5000	22.01	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

11.09 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_1, Channel = 4183, Frequency = 836.6MHz, Method = conducted**

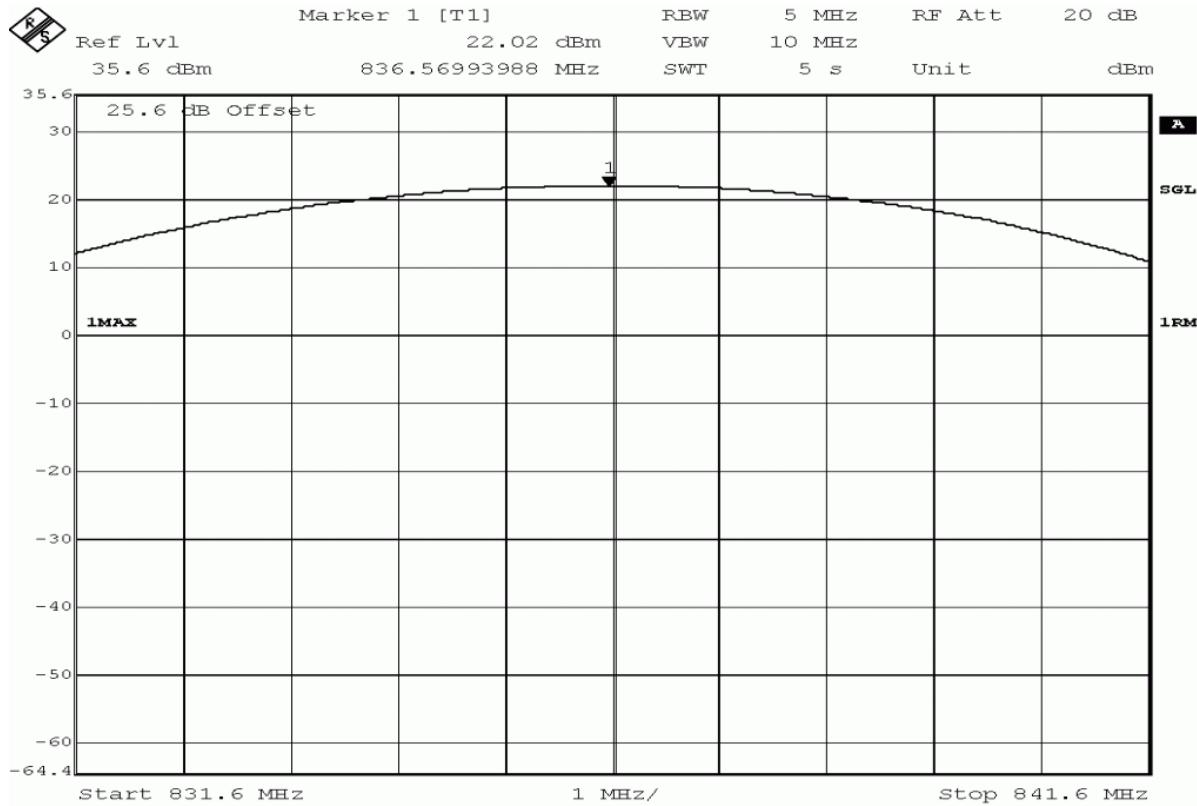
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 23:35

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 1 HSUPA FDD V, output power,  
 channel 4183 (836.6MHz)  
 Date: 19.AUG.2011 23:37:32



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.73	passed
average	maxhold	5000	21.58	passed
rms	maxhold	5000	22.02	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.86 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_1, Channel = 4233, Frequency = 846.6MHz, Method = conducted**

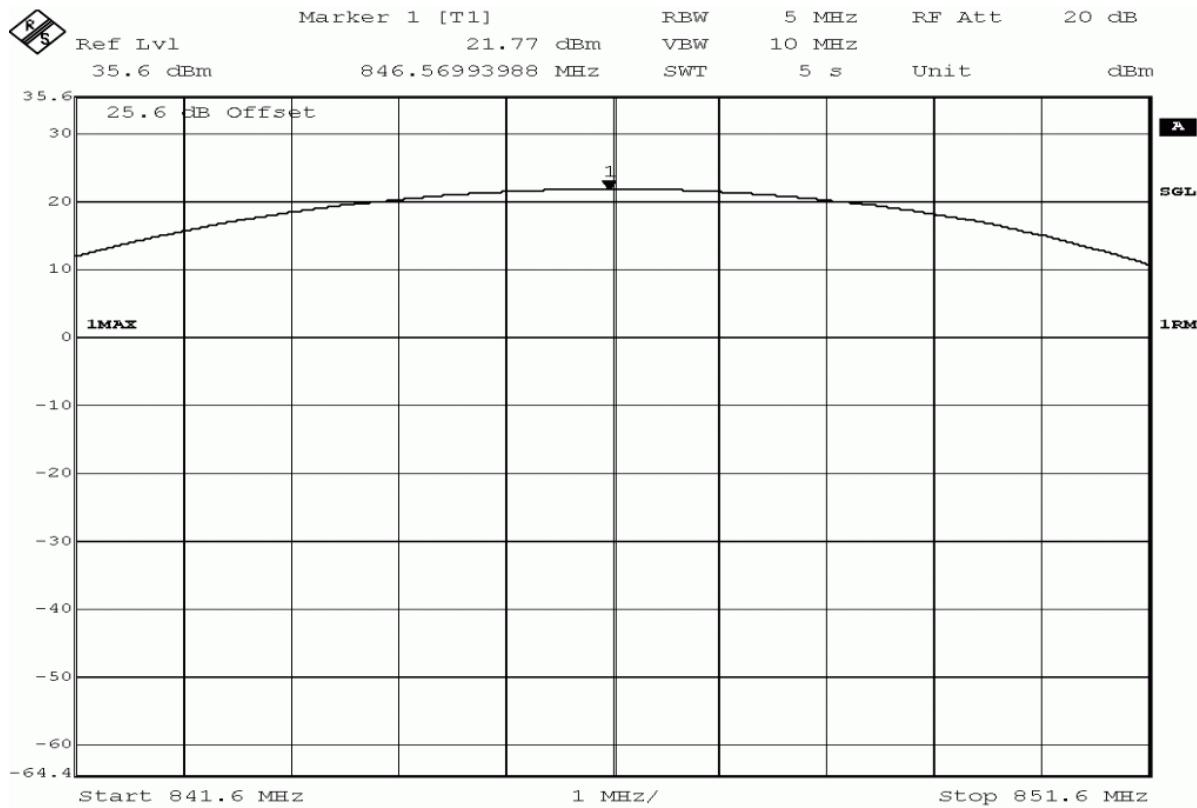
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 23:43

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 1 HSUPA FDD V, output power,  
 channel 4233 (846.6MHz)  
 Date: 19.AUG.2011 23:45:28



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.20	passed
average	maxhold	5000	21.32	passed
rms	maxhold	5000	21.77	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

11.39 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_2, Channel = 4132, Frequency = 826.4MHz, Method = conducted**

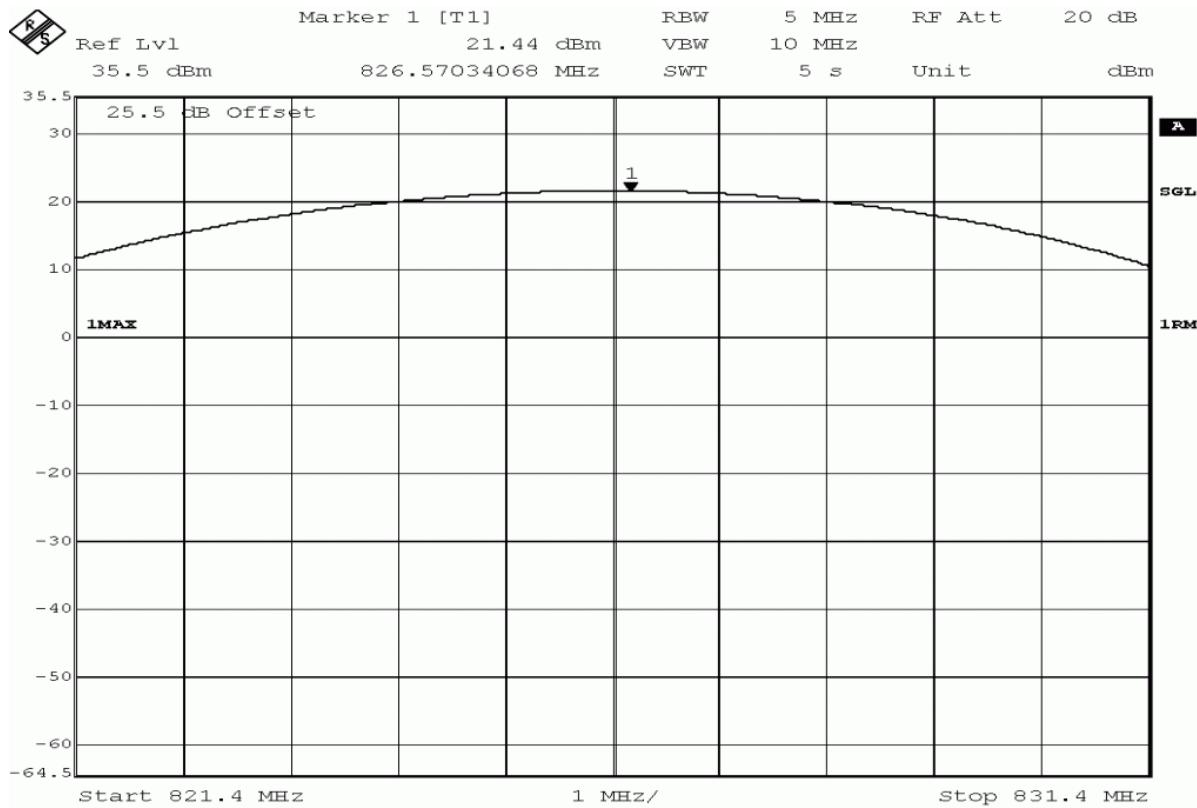
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:12

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 2 HSUPA FDD V, output power,  
 channel 4132 (826.4MHz)  
 Date: 20.AUG.2011 00:14:01



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.71	passed
average	maxhold	5000	20.58	passed
rms	maxhold	5000	21.44	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.88 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_2, Channel = 4183, Frequency = 836.6MHz, Method = conducted**

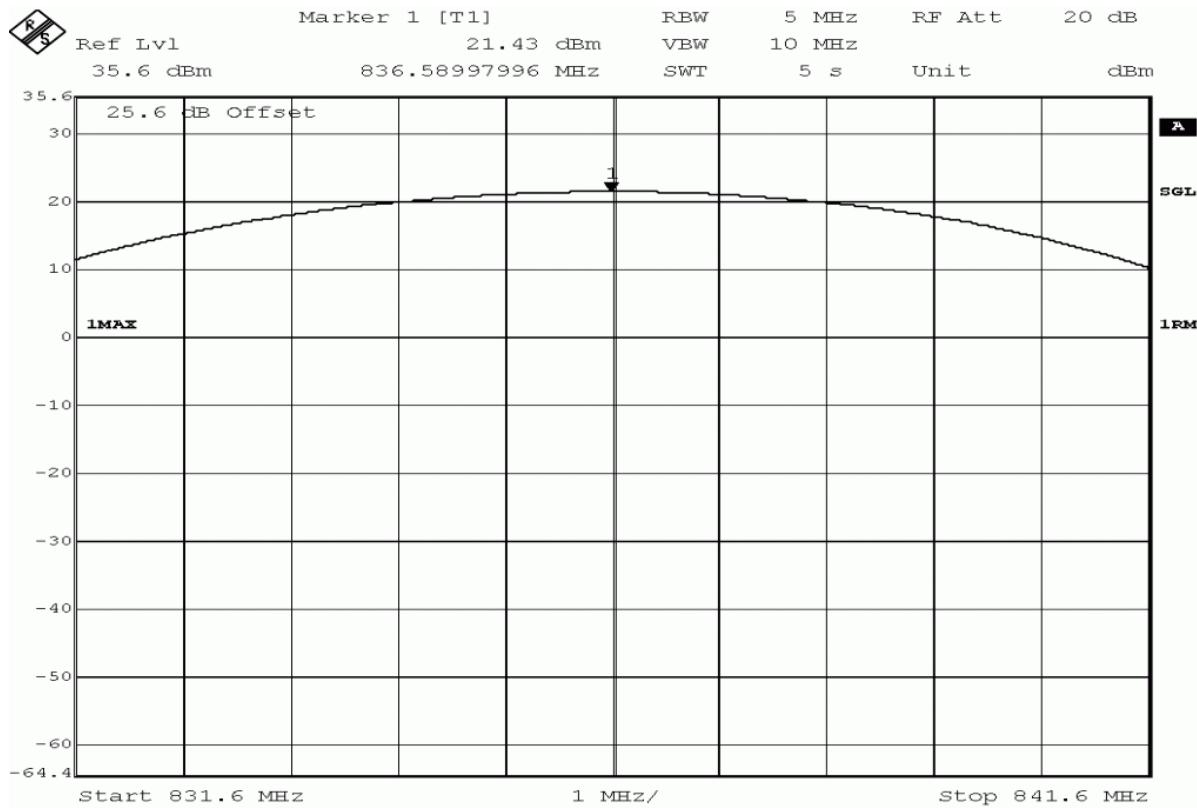
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:13

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 2 HSUPA FDD V, output power,  
 channel 4183 (836.6MHz)  
 Date: 20.AUG.2011 00:15:46



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.93	passed
average	maxhold	5000	20.53	passed
rms	maxhold	5000	21.43	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.66 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_2, Channel = 4233, Frequency = 846.6MHz, Method = conducted**

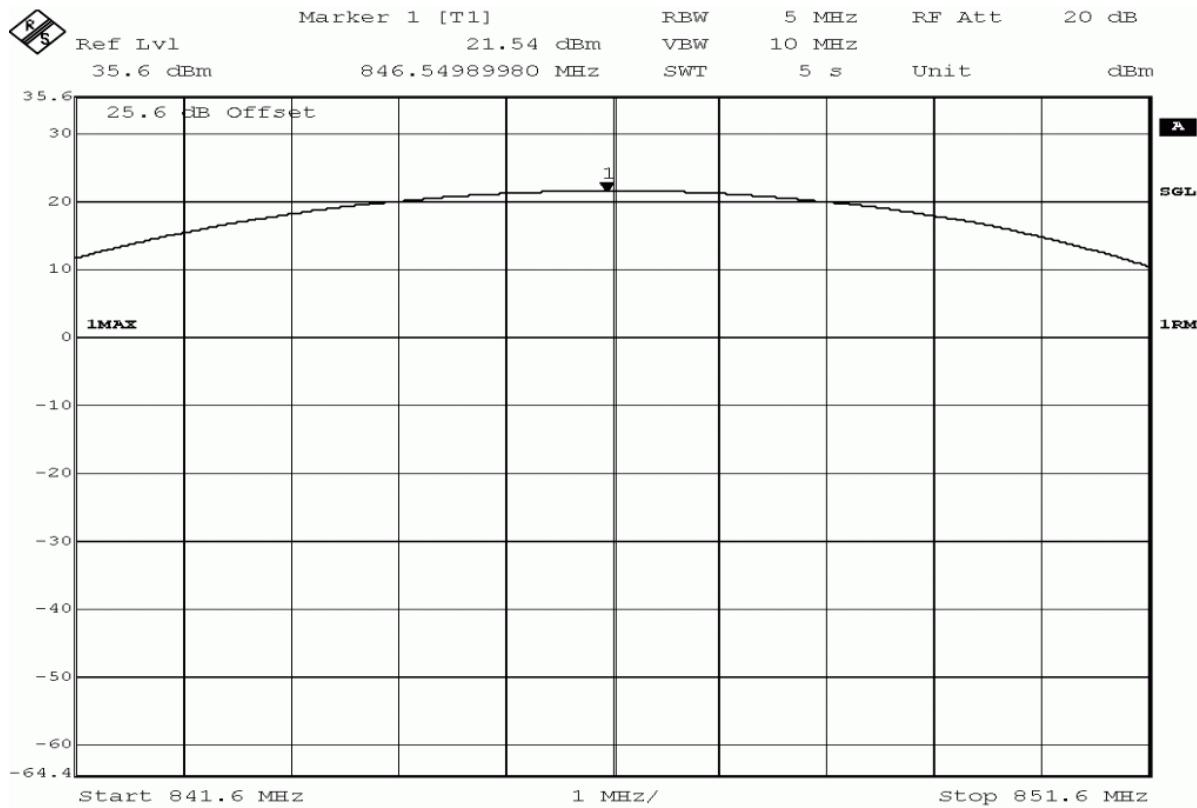
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:15

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 2 HSUPA FDD V, output power,  
 channel 4233 (846.6MHz)  
 Date: 20.AUG.2011 00:16:58



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	30.10	passed
average	maxhold	5000	20.65	passed
rms	maxhold	5000	21.54	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.49 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_3, Channel = 4132, Frequency = 826.4MHz, Method = conducted**

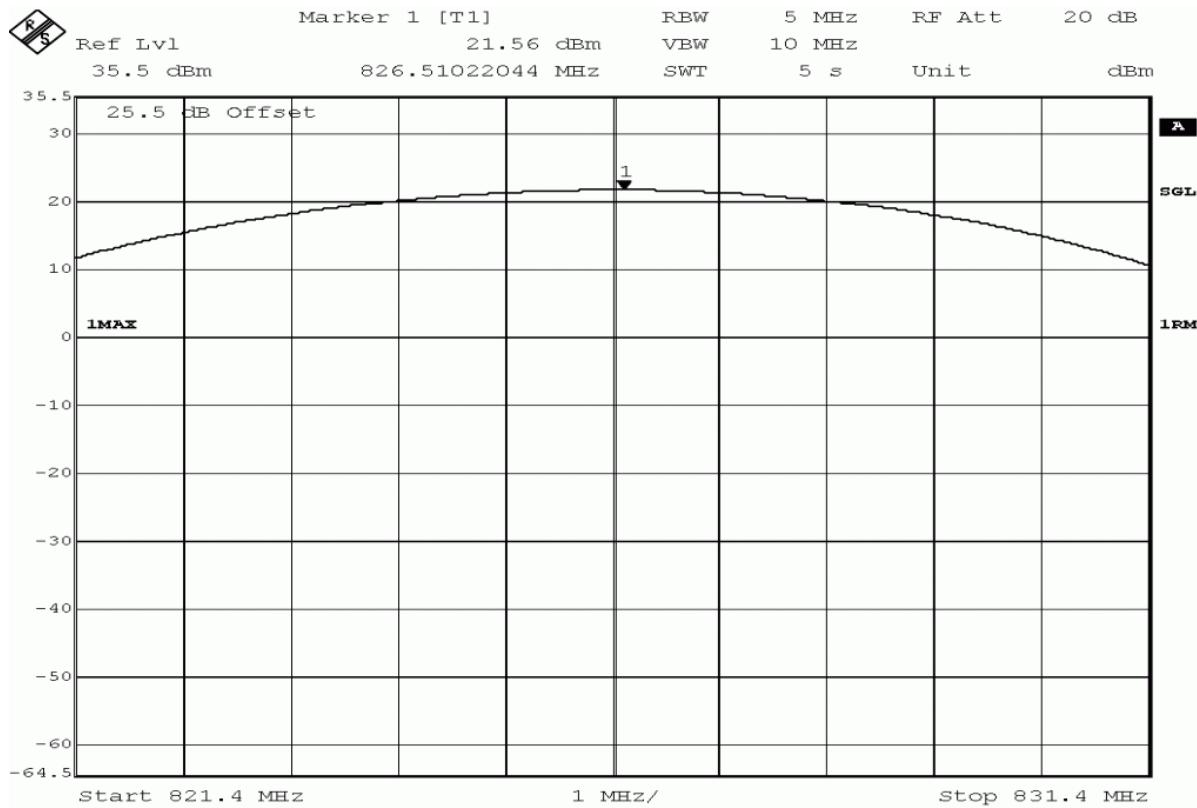
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:16

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 3 HSUPA FDD V, output power,  
 channel 4132 (826.4MHz)  
 Date: 20.AUG.2011 00:18:55



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	30.25	passed
average	maxhold	5000	20.69	passed
rms	maxhold	5000	21.56	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.34 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_3, Channel = 4183, Frequency = 836.6MHz, Method = conducted**

*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:30

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

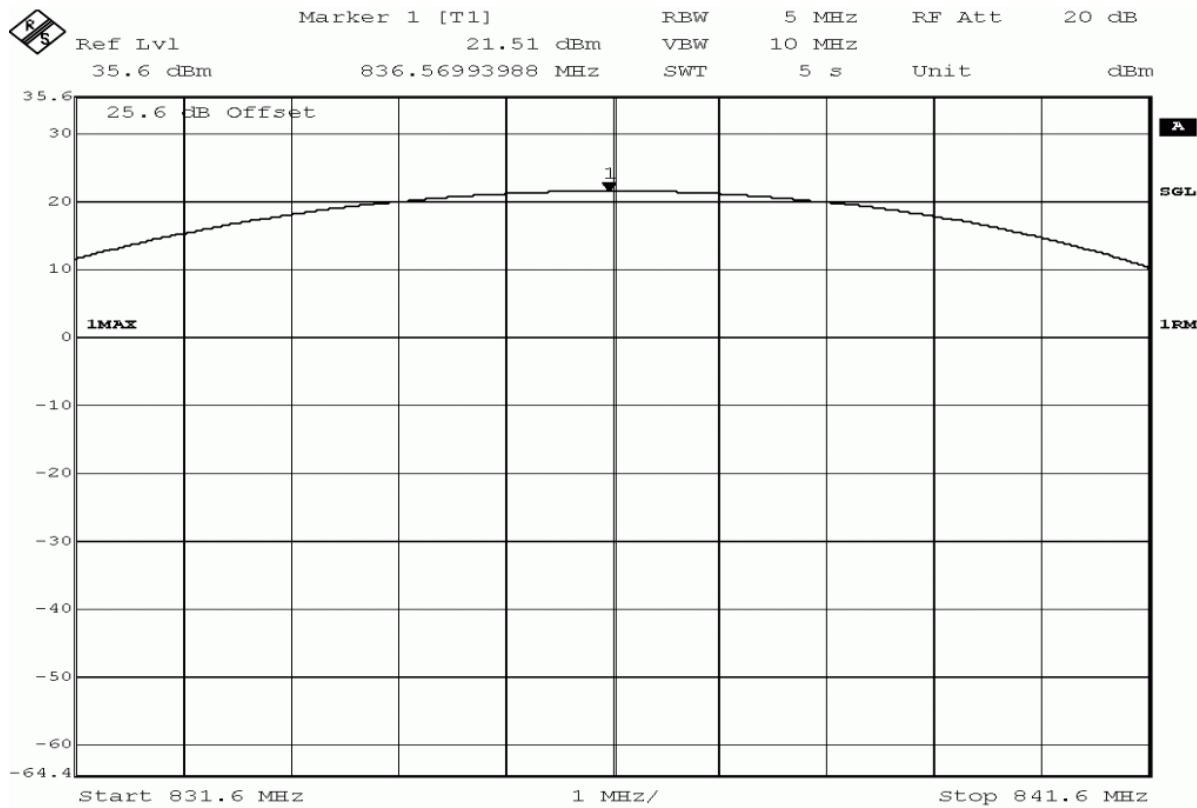
*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Detailed Results:**



Title: output power measurement  
Comment A: CZ600, subtest 3 HSUPA FDD V, output power,  
channel 4183 (836.6MHz)  
Date: 20.AUG.2011 00:32:37



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.73	passed
average	maxhold	5000	20.60	passed
rms	maxhold	5000	21.51	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.86 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_3, Channel = 4233, Frequency = 846.6MHz, Method = conducted**

*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:33

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

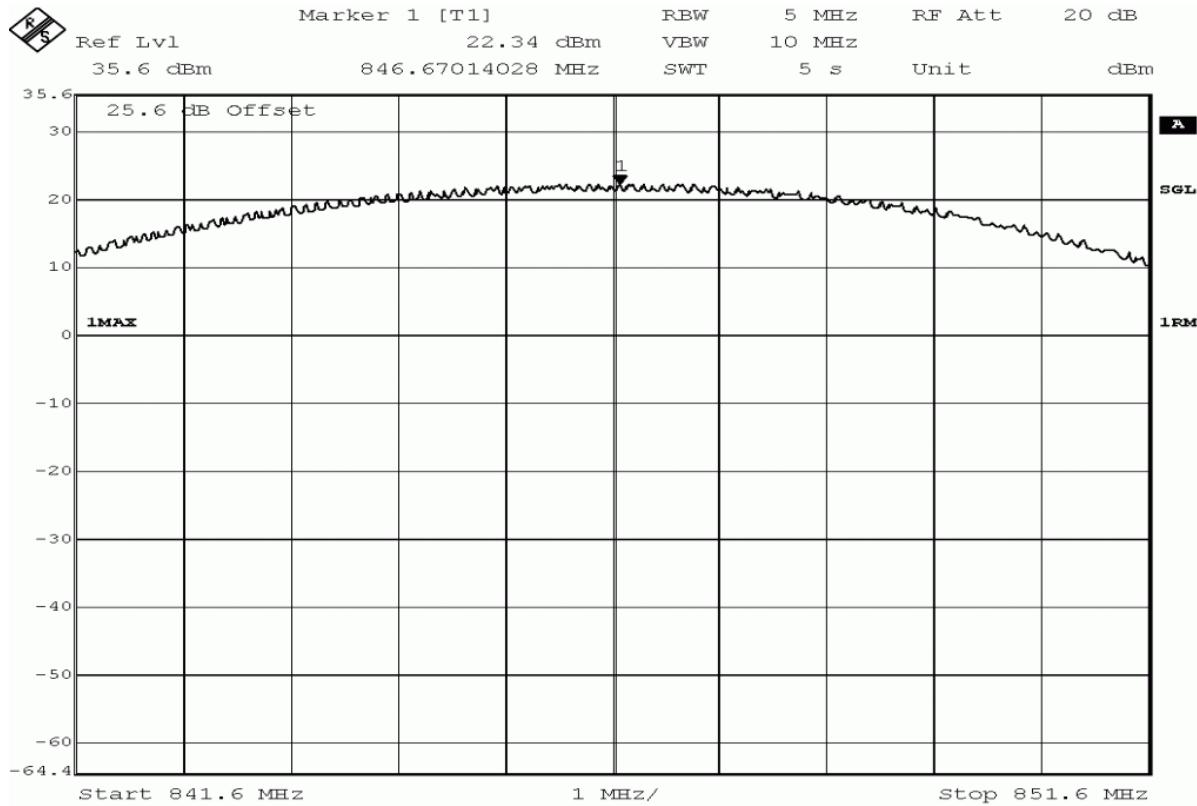
*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

## Detailed Results:



Title: output power measurement  
Comment A: CZ600, subtest 3 HSUPA FDD V, output power,  
channel 4233 (846.6MHz)  
Date: 20.AUG.2011 00:34:58



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	30.50	passed
average	maxhold	5000	21.51	passed
rms	maxhold	5000	22.34	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.09 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_4, Channel = 4132, Frequency = 826.4MHz, Method = conducted**

*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:38

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

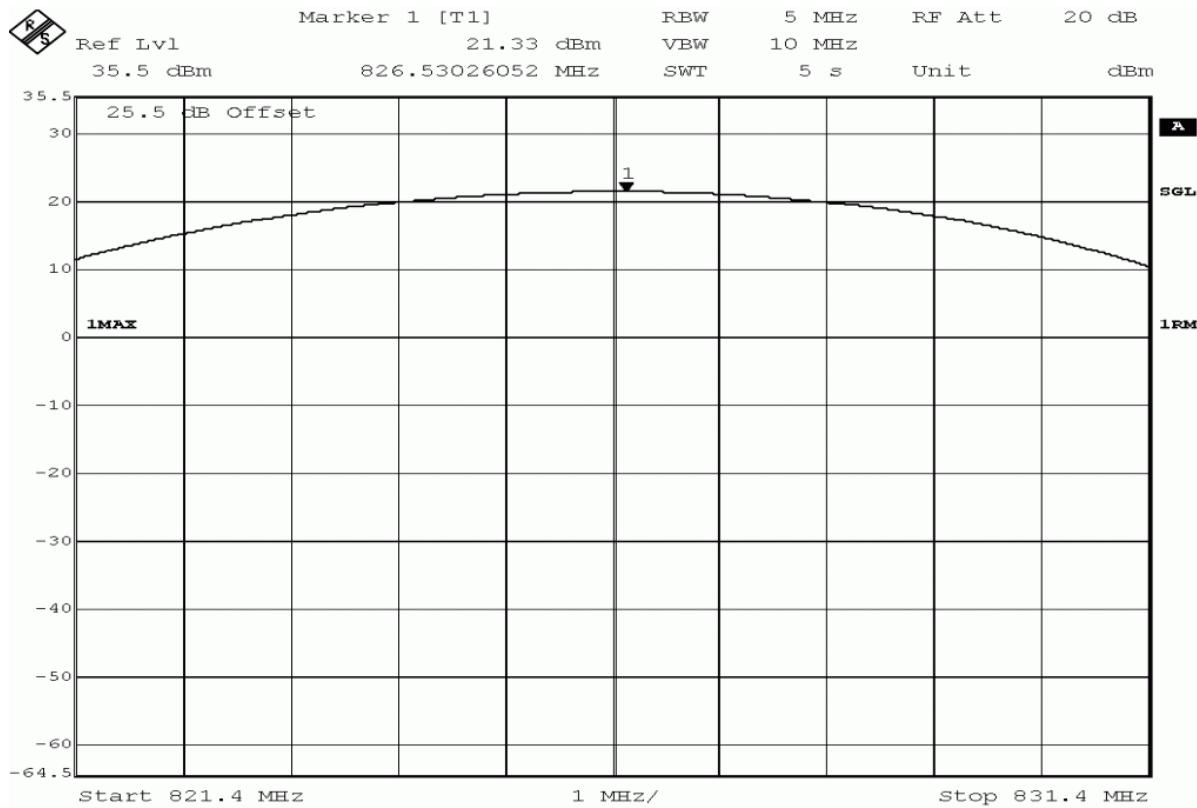
*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Detailed Results:**



Title: output power measurement  
Comment A: CZ600, subtest 4 HSUPA FDD V, output power,  
channel 4132 (826.4MHz)  
Date: 20.AUG.2011 00:40:14



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.50	passed
average	maxhold	5000	20.55	passed
rms	maxhold	5000	21.33	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

11.09 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_4, Channel = 4183, Frequency = 836.6MHz, Method = conducted**

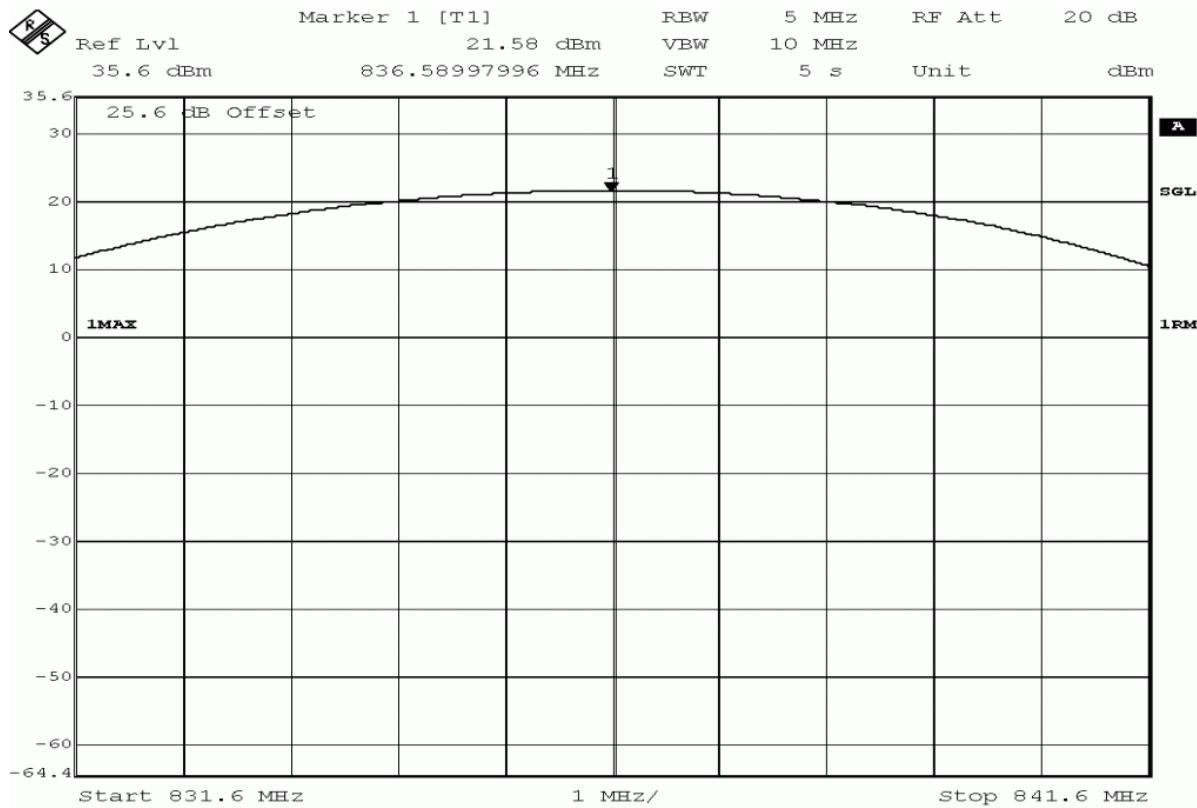
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:41

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 4 HSUPA FDD V, output power,  
 channel 4183 (836.6MHz)  
 Date: 20.AUG.2011 00:43:44



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.73	passed
average	maxhold	5000	20.60	passed
rms	maxhold	5000	21.58	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.86 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_4, Channel = 4233, Frequency = 846.6MHz, Method = conducted**

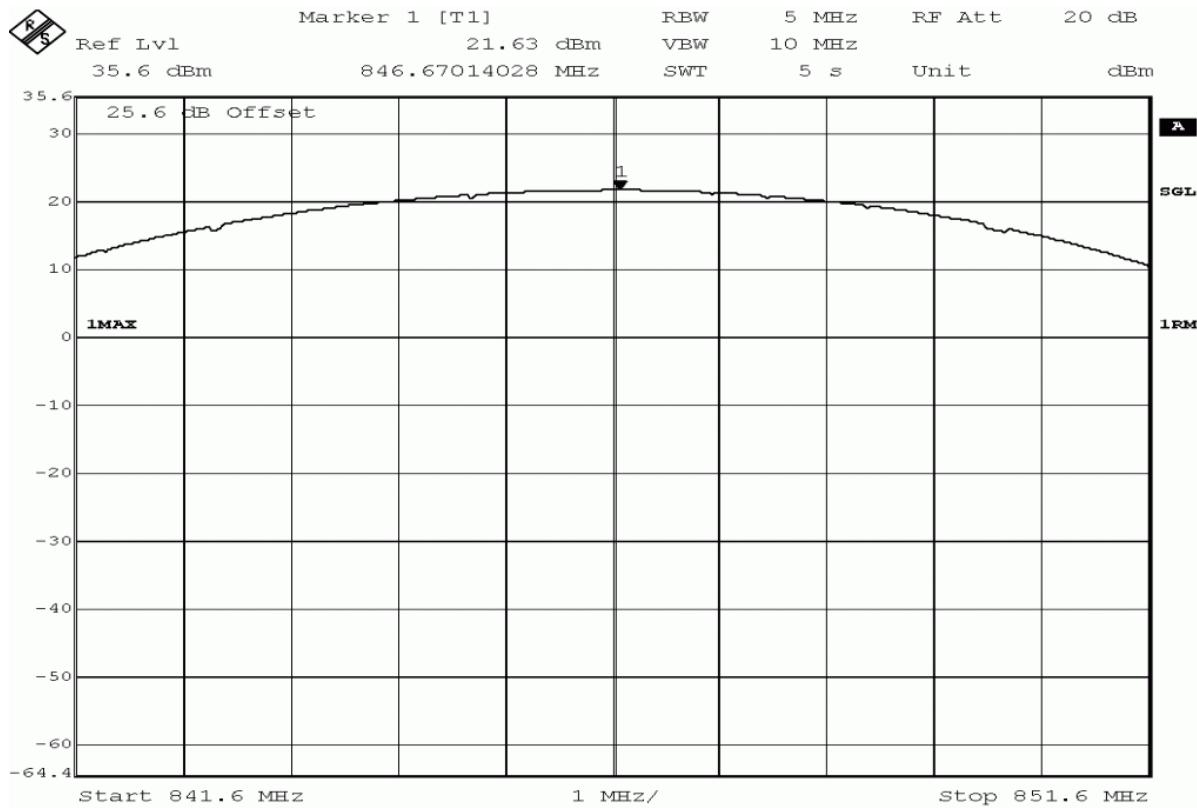
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:42

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 4 HSUPA FDD V, output power,  
 channel 4233 (846.6MHz)  
 Date: 20.AUG.2011 00:44:52



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.81	passed
average	maxhold	5000	20.73	passed
rms	maxhold	5000	21.63	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.78 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_5, Channel = 4132, Frequency = 826.4MHz, Method = conducted**

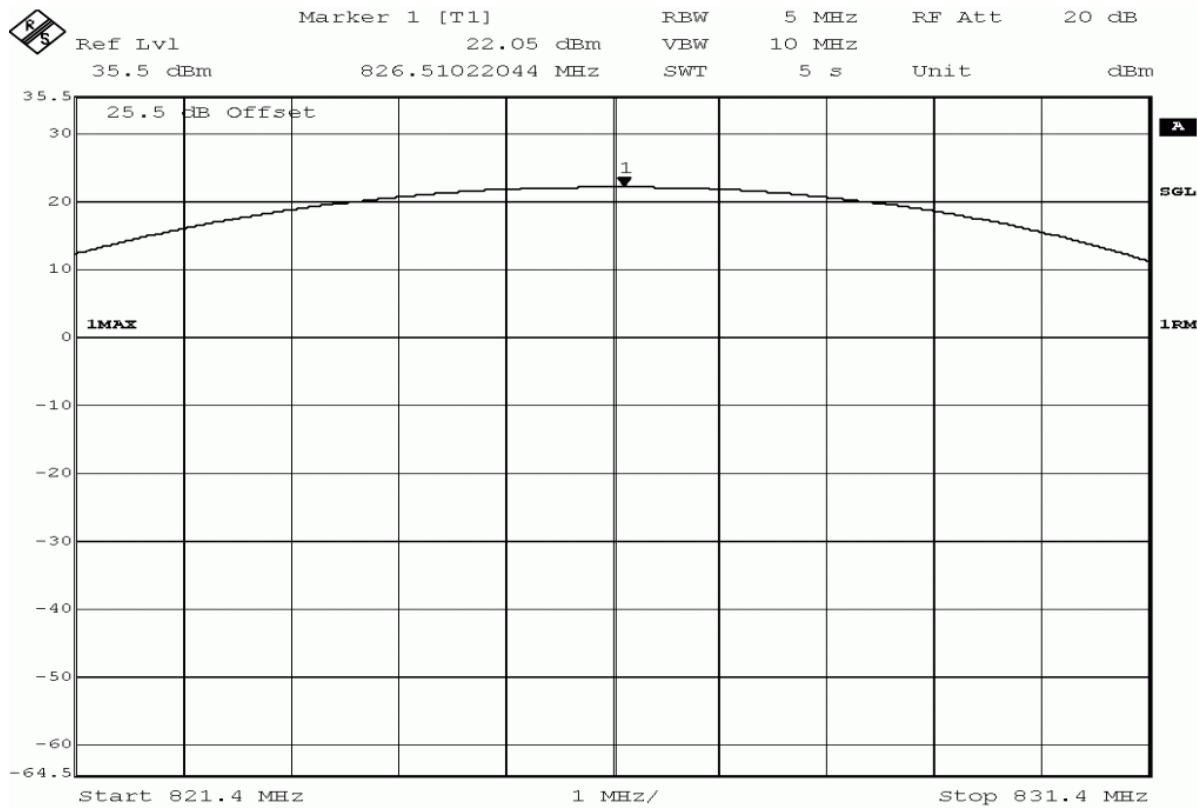
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:45

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 5 HSUPA FDD V, output power,  
 channel 4132 (826.4MHz)  
 Date: 20.AUG.2011 00:46:59



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	29.63	passed
average	maxhold	5000	21.70	passed
rms	maxhold	5000	22.05	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

10.96 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_5, Channel = 4183, Frequency = 836.6MHz, Method = conducted**

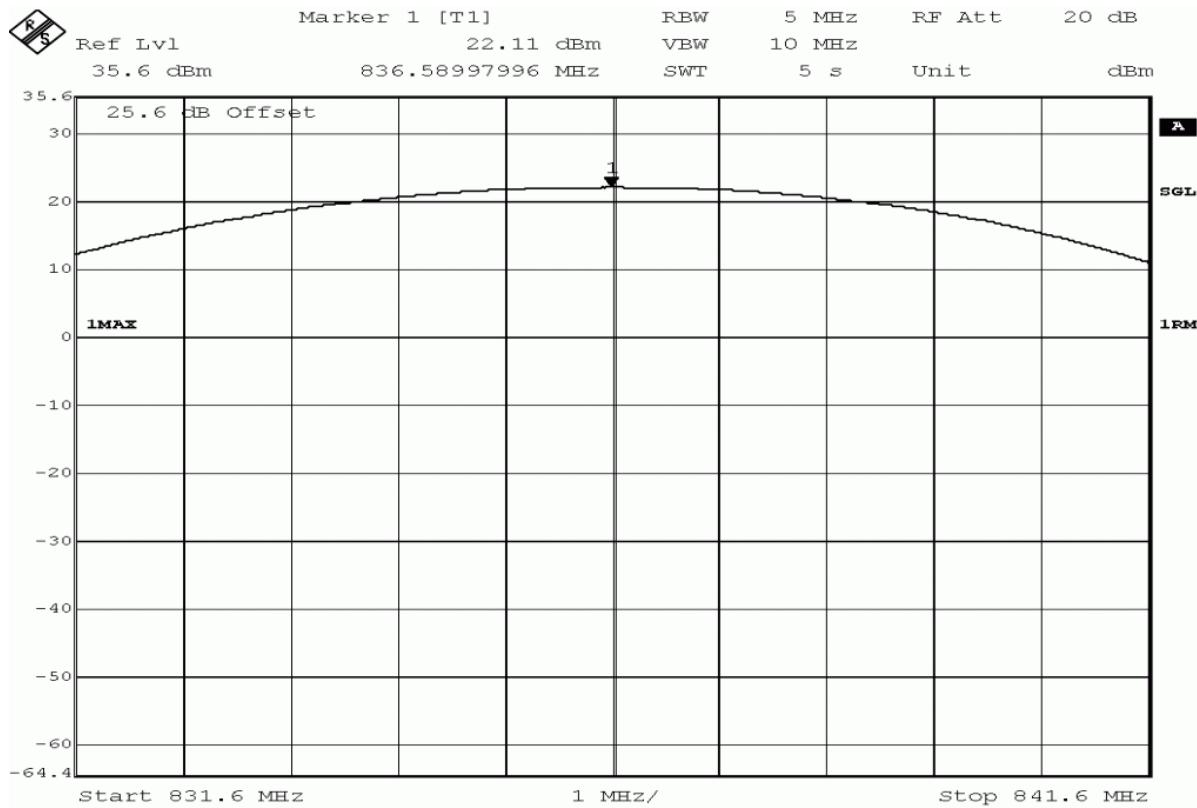
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:46

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 5 HSUPA FDD V, output power,  
 channel 4183 (836.6MHz)  
 Date: 20.AUG.2011 00:48:07



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	28.94	passed
average	maxhold	5000	21.72	passed
rms	maxhold	5000	22.11	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

11.65 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = HSUPA\_subtest\_5, Channel = 4233, Frequency = 846.6MHz, Method = conducted**

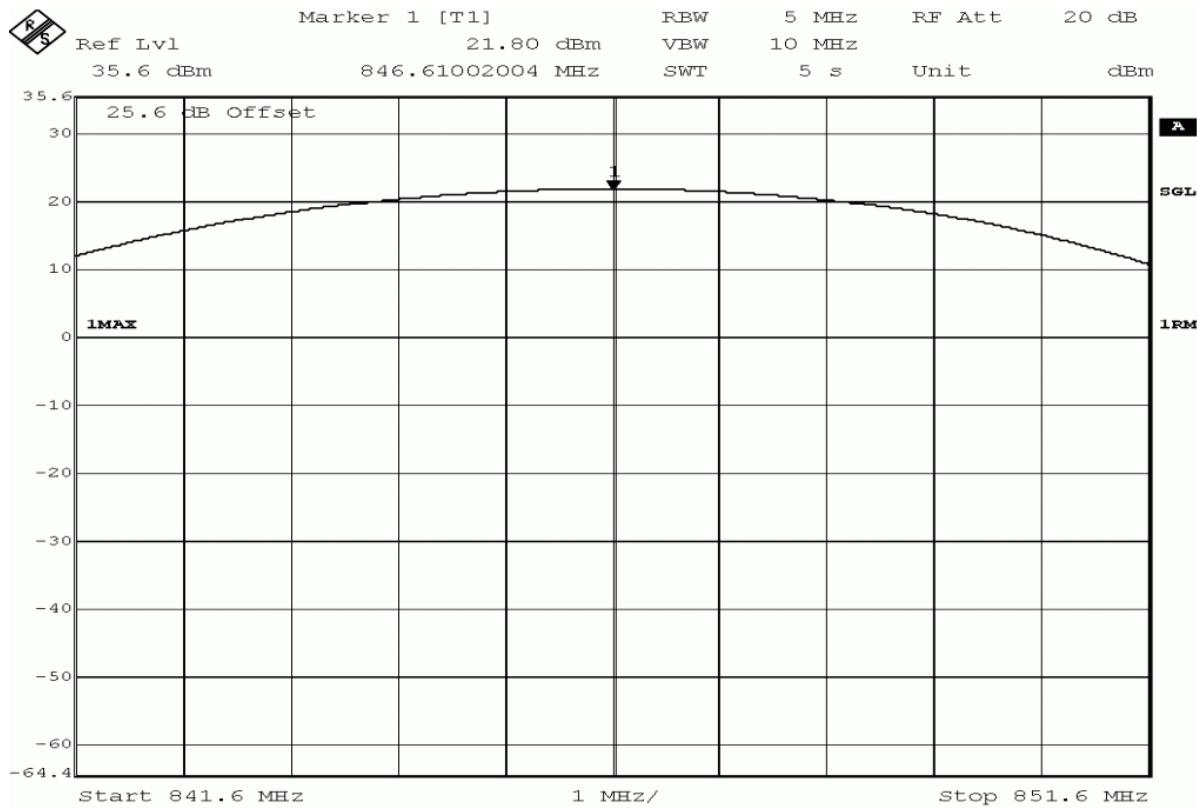
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/20 0:47

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, subtest 5 HSUPA FDD V, output power,  
 channel 4233 (846.6MHz)  
 Date: 20.AUG.2011 00:49:32



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	28.70	passed
average	maxhold	5000	21.05	passed
rms	maxhold	5000	21.80	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

11.89 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4132, Frequency = 826.4MHz, Method = conducted**

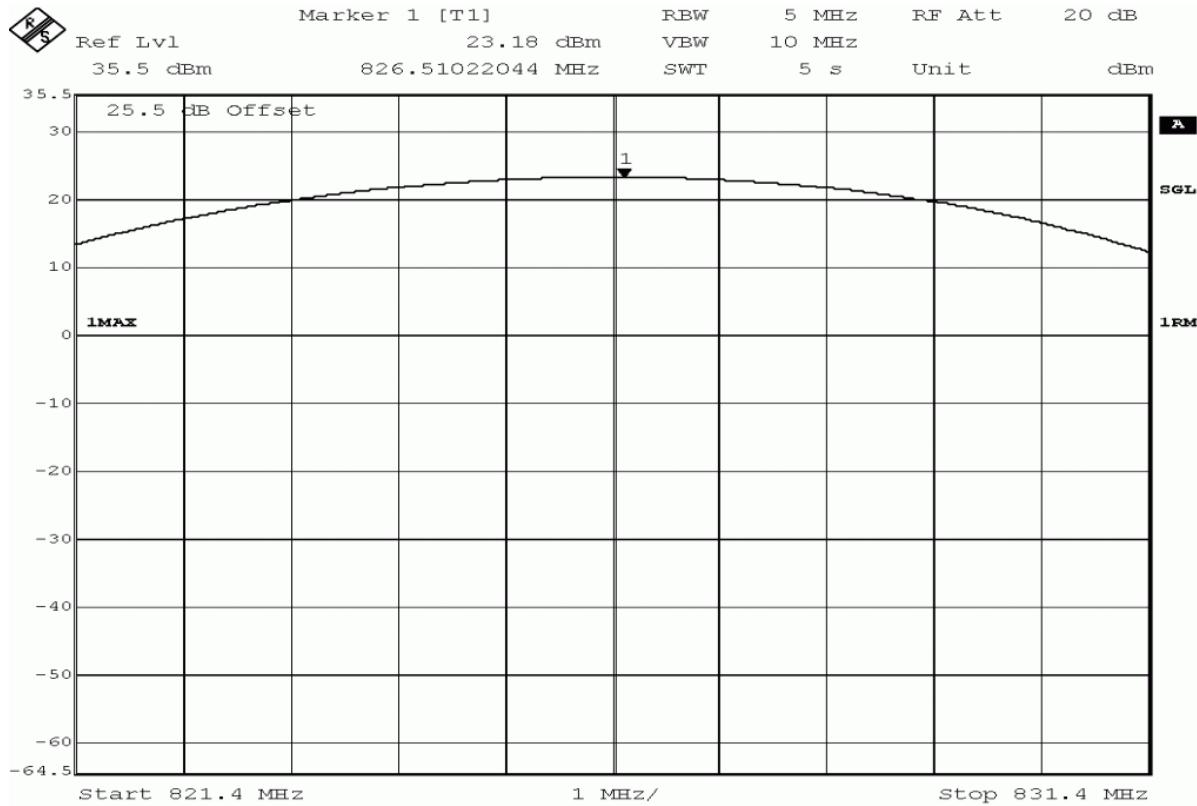
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 22:17

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, FDD V, output power,  
 channel 4132 (826.4MHz)  
 Date: 19.AUG.2011 22:19:10



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	28.84	passed
average	maxhold	5000	23.07	passed
rms	maxhold	5000	23.18	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

11.75 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4183, Frequency = 836.6MHz, Method = conducted**

*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 22:23

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

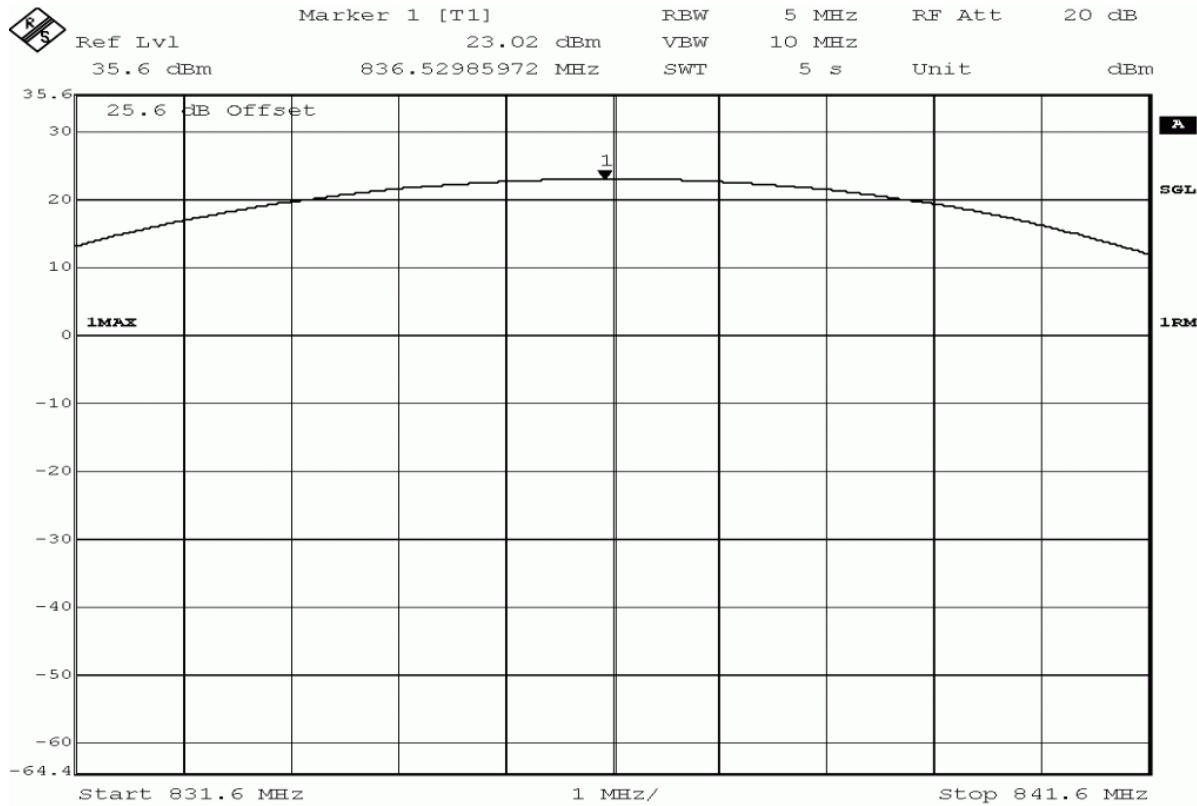
*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Detailed Results:**



Title: output power measurement  
Comment A: CZ600, FDD V, output power,  
channel 4183 (836.6MHz)  
Date: 19.AUG.2011 22:25:11



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	28.42	passed
average	maxhold	5000	22.69	passed
rms	maxhold	5000	23.02	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

12.17 dBi

**Test: 22.1; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4233, Frequency = 846.6MHz, Method = conducted**

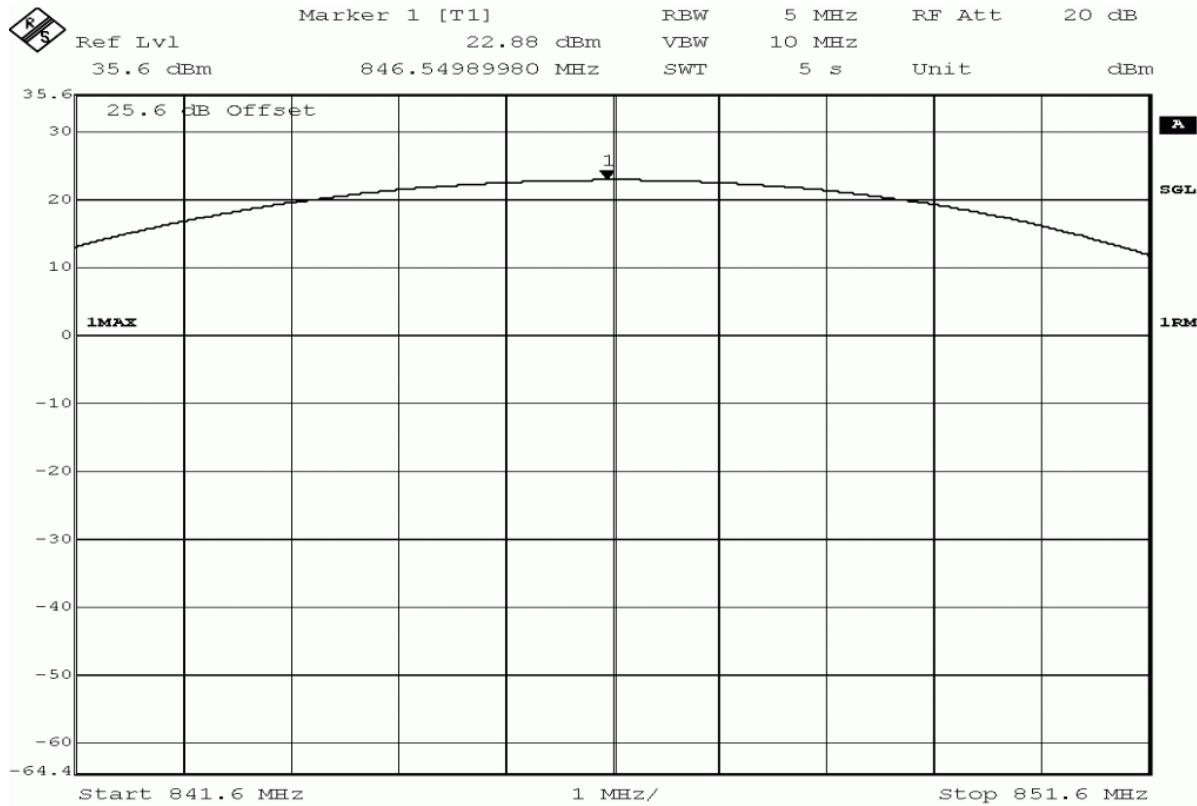
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 22:29

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


Title: output power measurement  
 Comment A: CZ600, FDD V, output power,  
 channel 4233 (846.6MHz)  
 Date: 19.AUG.2011 22:31:37



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

detector	trace	resolution bandwidth /kHz	conducted peak value /dBm	verdict
peak	maxhold	5000	28.57	passed
average	maxhold	5000	22.67	passed
rms	maxhold	5000	22.88	passed

no external antenna gain is specified, the verdict is valid

for external antenna gains equal or less than

12.02 dBi



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

### **3.5.2 22.2 Frequency stability §2.1055**

**Test: 22.2; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz**

*Result:* Passed

*Setup No.:* B01\_RF1

*Date of Test:* 2011/08/19 8:58

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Detailed Results:**

FCC part 22 frequency stability			
EDGE 850 TCH 190			
Temp. °C	Duration min	Normal Voltage / V	
		4.2	
Temp. °C	Duration min	Freq. error Average	Freq. error Max. (Hz)
-30	0	33	39
-30	5	35	44
-30	10	38	45
-20	0	-31	-37
-20	5	-18	-24
-20	10	-24	-30
-10	0	1	7
-10	5	-20	-35
-10	10	26	33
0	0	24	29
0	5	21	28
0	10	15	22
10	0	-14	-22
10	5	-39	-45
10	10	-31	-36
30	0	-46	-56
30	5	-42	-46
30	10	-29	-33
40	0	-42	-52
40	5	-22	-27
40	10	-36	-41
50	0	-16	-22
50	5	-39	-46
50	10	-45	-52
Remark	none		
Minimum Voltage / V			
85% = 3.3		100% = 4.2	
Temp. °C	Duration min	Freq. error Average	Freq. error Max. (Hz)
20	0	-37	-44
20	5	-38	-43
20	10	-31	-36
Remark	The EUT was not able to reach (115% of normal voltage)		



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Test: 22.2; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz**

*Result:* Passed

*Setup No.:* B01\_RF1

*Date of Test:* 2011/08/19 8:58

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**

FCC part 22 frequency stability							
GSM 850 TCH 190							
Temp. °C	Duration min	Normal Voltage / V					
		4.2					
-30	0	5	9				
-30	5	-3	-6				
-30	10	18	11				
-20	0	16	23				
-20	5	-4	-11				
-20	10	14	19				
-10	0	20	25				
-10	5	12	16				
-10	10	25	28				
0	0	18	28				
0	5	12	19				
0	10	10	14				
10	0	-12	-19				
10	5	-5	-10				
10	10	-2	-6				
30	0	-24	-33				
30	5	-26	-37				
30	10	-12	-17				
40	0	-16	-24				
40	5	-8	-11				
40	10	-8	-13				
50	0	-24	-45				
50	5	-11	-17				
50	10	-18	-30				
Remark	none						
Minimum Voltage / V							
85% = 3.3							
Temp. °C	Duration min	Freq. error Average	Freq. error Max. (Hz)	Freq. error Average	Freq. error Max. (Hz)	Freq. error Average	Freq. error Max. (Hz)
20	0	-18	-25	-31	-40	-	-
20	5	-10	-16	-24	-28	-	-
20	10	2	6	-11	-16	-	-
Remark	The EUT was not able to reach (115% of normal voltage)						



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Test: 22.2; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency = 836.6MHz**

*Result:* Passed

*Setup No.:* B01\_RF1

*Date of Test:* 2011/08/19 8:55

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**

FCC part 22 frequency stability							
UTRA FDD V HSDPA UARFCN 4183							
Temp. °C	Duration min	Normal Voltage / V		4.2			
		Freq. error Average	“+/-”	Freq. error Max. (Hz)			
-30	0	-7		-11			
-30	5	-5		-10			
-30	10	-2		-5			
-20	0	-2		-9			
-20	5	-3		-9			
-20	10	-2		-8			
-10	0	-3		-11			
-10	5	-4		-9			
-10	10	-3		-7			
0	0	6		15			
0	5	4		11			
0	10	4		9			
10	0	-4		-11			
10	5	0		10			
10	10	2		8			
30	0	-2		-8			
30	5	1		7			
30	10	2		8			
40	0	-4		-9			
40	5	-5		-10			
40	10	-5		-9			
50	0	-4		10			
50	5	-4		14			
50	10	-3		-18			
Remark	none						
Minimum Voltage / V							
85% = 3.3							
Temp. °C	Duration min	Freq. error	Freq. error	Freq. error	Freq. error	Freq. error	Freq. error
		Average	Max. (Hz)	Average	Max. (Hz)	Average	Max. (Hz)
20	0	-4	-13	-5	-12	-	-
20	5	-5	-14	1	7	-	-
20	10	-2	-13	2	9	-	-
Remark	The EUT was not able to reach (115% of normal voltage)						



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Test: 22.2; Frequency Band = FDD5, Mode = HSUPA, Channel = 4183, Frequency = 836.6MHz**

*Result:* Passed

*Setup No.:* B01\_RF1

*Date of Test:* 2011/08/19 8:59

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**

FCC part 22 frequency stability							
UTRA FDD V HSUPA UARFCN 4183							
Temp. °C	Duration min	Normal Voltage / V		4.2			
		Freq. error Average	“+”	Freq. error Max. (Hz)	“+”		
-30	0	-4		-8			
-30	5	-2		-4			
-30	10	3		17			
-20	0	-4		-10			
-20	5	-2		-4			
-20	10	3		16			
-10	0	-3		-11			
-10	5	2		19			
-10	10	5		22			
0	0	-4		-12			
0	5	-4		-9			
0	10	0		-7			
10	0	-3		-9			
10	5	-5		-7			
10	10	-2		-5			
30	0	-1		-10			
30	5	-2		-7			
30	10	3		6			
40	0	-6		-12			
40	5	-5		-9			
40	10	-4		-6			
50	0	2		9			
50	5	3		10			
50	10	-1		-4			
Remark	none						
Minimum Voltage / V							
85% = 3.3							
Temp. °C	Duration min	Freq. error	Freq. error	Freq. error	Freq. error	Freq. error	Freq. error
		Average	Max. (Hz)	Average	Max. (Hz)	Average	Max. (Hz)
20	0	-4	-9	-3	-8	-	-
20	5	-5	-7	-2	-5	-	-
20	10	-4	-9	-1	-3	-	-
Remark	The EUT was not able to reach (115% of normal voltage)						



Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

**Test: 22.2; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4183, Frequency = 836.6MHz**

*Result:* Passed

*Setup No.:* B01\_RF1

*Date of Test:* 2011/08/19 8:59

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**

FCC part 22 frequency stability							
UTRA FDD V UARFCN 4183							
Temp. °C	Duration min	Normal Voltage / V		4.2			
		Freq. error Average	“+”	Freq. error Max. (Hz)			
-30	0	-6		-20			
-30	5	-1		-18			
-30	10	-5		-18			
-20	0	2		19			
-20	5	-5		-17			
-20	10	-4		-16			
-10	0	-3		-19			
-10	5	-3		-14			
-10	10	-5		-18			
0	0	5		21			
0	5	3		14			
0	10	4		18			
10	0	-1		-22			
10	5	-6		-11			
10	10	-6		-15			
30	0	6		16			
30	5	6		12			
30	10	-1		-14			
40	0	-4		-20			
40	5	-3		-11			
40	10	-4		-15			
50	0	-4		-11			
50	5	-4		-12			
50	10	-3		-16			
Remark	none						
Minimum Voltage / V							
85% = 3.3							
Temp. °C	Duration min	Freq. error Average	Freq. error Max. (Hz)	Freq. error Average	Freq. error Max. (Hz)	Freq. error Average	Freq. error Max. (Hz)
		“+”	“+”	“+”	“+”	“+”	“+”
20	0	-1	9	0	12	-	-
20	5	-8	-21	5	15	-	-
20	10	-8	-18	-2	-11	-	-
Remark	The EUT was not able to reach (115% of normal voltage)						



---

Reference: MDE\_CINTE\_1107\_FCCb

acc. Title 47 CFR chapter I part 22 subpart H

### **3.5.3 22.3 Spurious emissions at antenna terminals §2.1051, §22.917**

**Test: 22.3; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz**

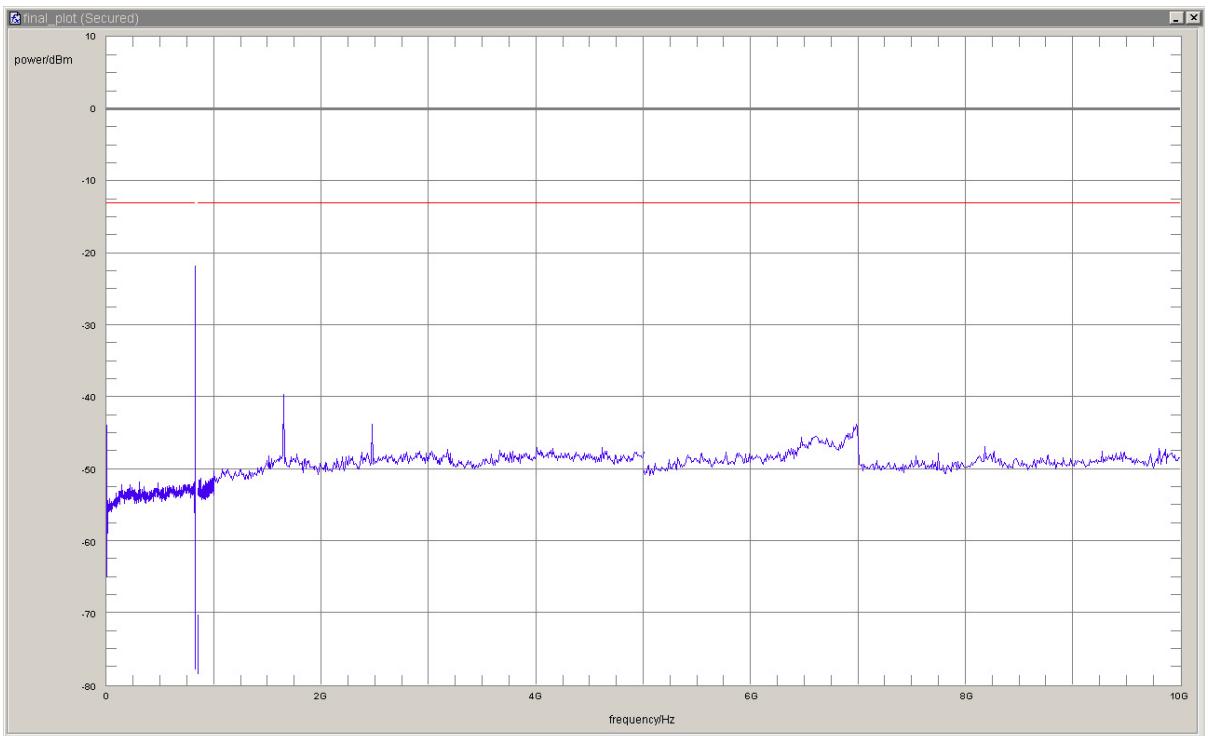
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 20:22

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
peak	maxhold	3	823.9379	-31.8	18.8	-13.0	passed
peak	maxhold	3	823.9559	-26.3	13.3	-13.0	passed
peak	maxhold	3	823.9800	-21.8	8.8	-13.0	passed
peak	maxhold	3	823.9900	-23.0	10.0	-13.0	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz**

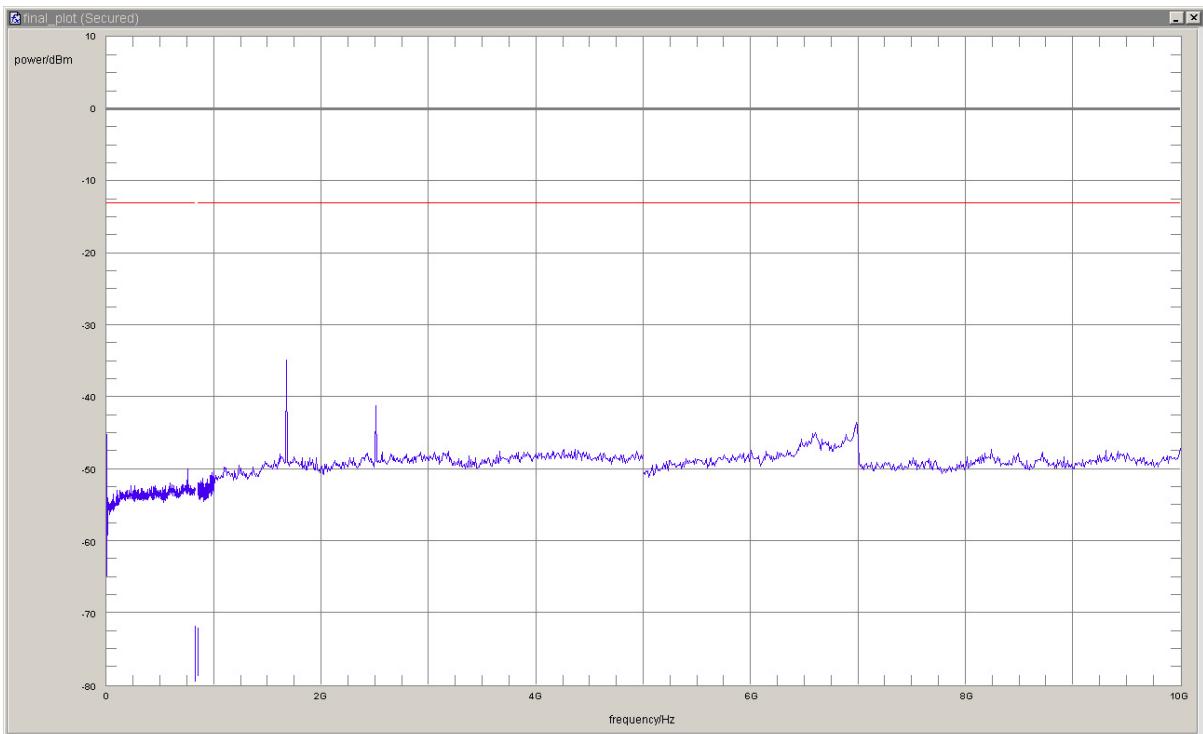
Result: Passed

Setup No.: B01\_direct

Date of Test: 2011/08/19 20:05

Body: FCC47CFRChIPART22PUBLIC MOBILE SERVICES

Test Specification: FCC part 2 and 22

**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
peak	maxhold	100	1673.347	-34.82	21.82	-13	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz**

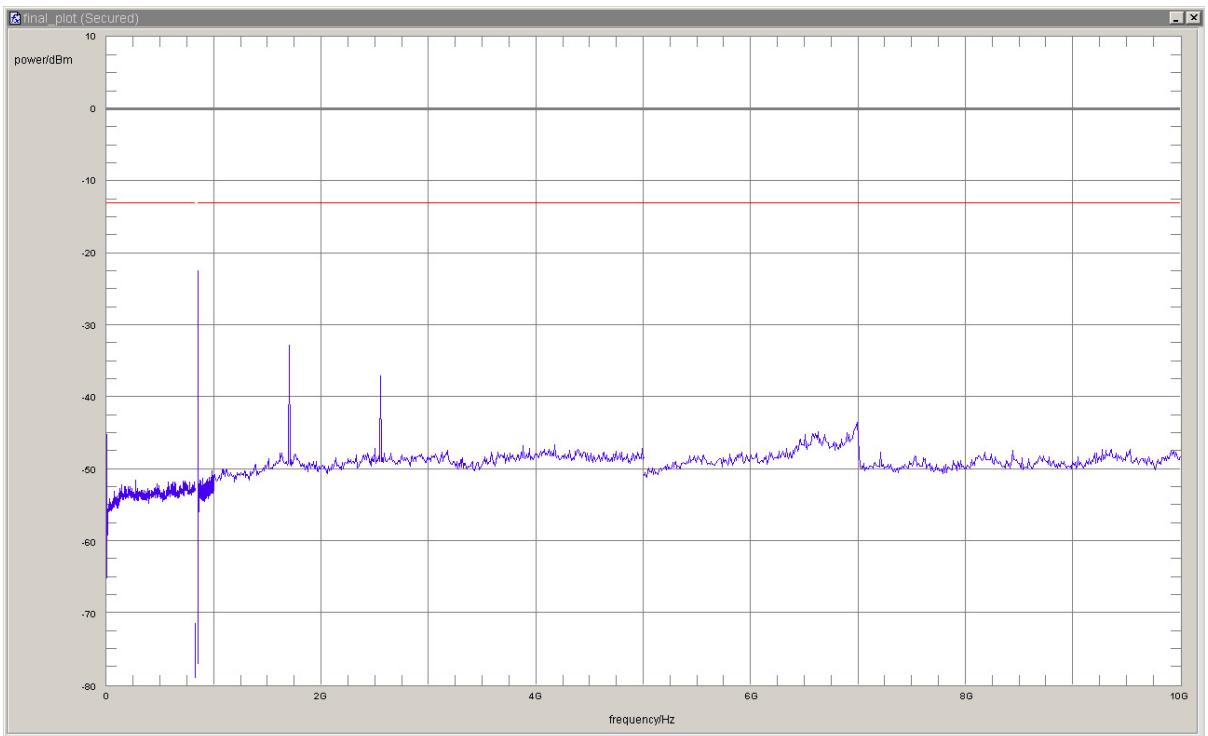
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 20:36

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
peak	maxhold	3	849.0020	-23.6	10.6	-13.0	passed
peak	maxhold	3	849.0080	-23.8	10.8	-13.0	passed
peak	maxhold	3	849.0240	-22.5	9.5	-13.0	passed
peak	maxhold	3	849.0321	-22.9	9.9	-13.0	passed
peak	maxhold	3	849.0501	-25.8	12.8	-13.0	passed
peak	maxhold	3	849.0561	-32.9	19.9	-13.0	passed
peak	maxhold	3	849.0701	-30.3	17.3	-13.0	passed
peak	maxhold	100	1697.39	-32.8	19.8	-13.0	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz,**

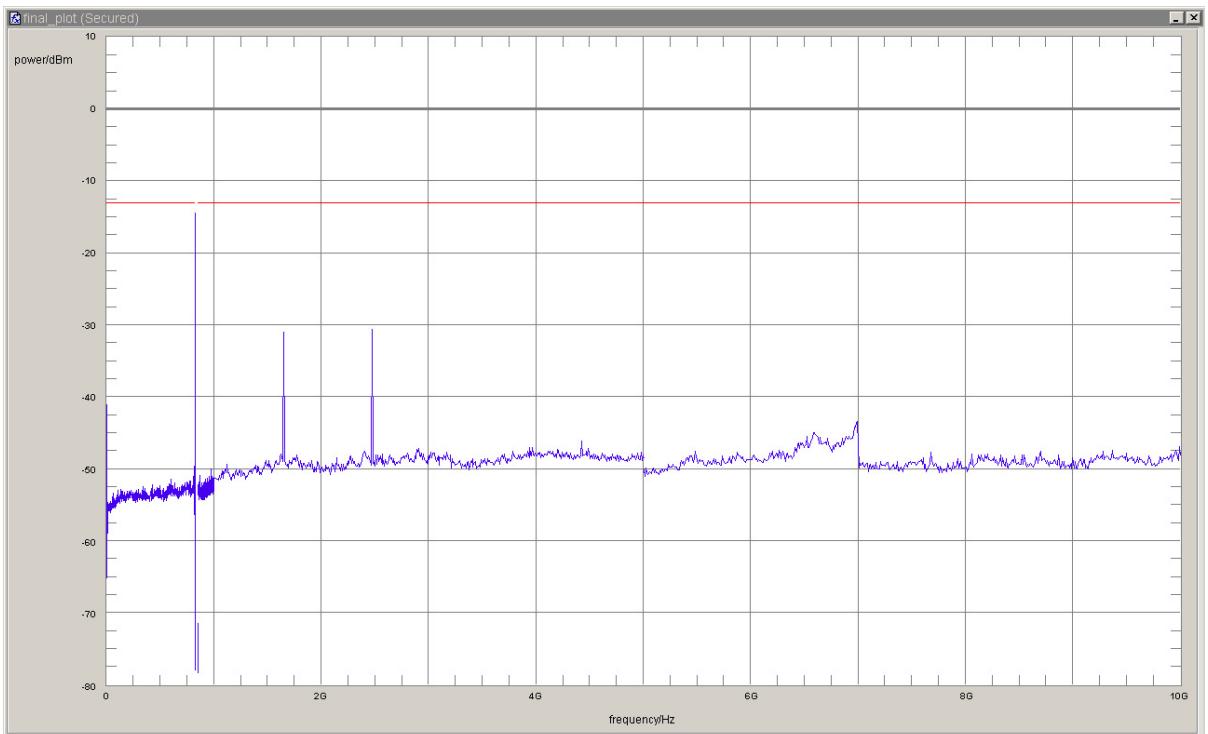
Result: Passed

Setup No.: B01\_direct

Date of Test: 2011/08/19 22:14

Body: FCC47CFRChIPART22PUBLIC MOBILE SERVICES

Test Specification: FCC part 2 and 22

**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
peak	maxhold	3	823.9178	-24.4	11.4	-13.0	passed
peak	maxhold	3	823.9419	-21.8	8.8	-13.0	passed
peak	maxhold	3	823.9719	-15.0	2.0	-13.0	passed
peak	maxhold	3	823.9820	-14.8	1.8	-13.0	passed
peak	maxhold	3	823.9980	-14.4	1.4	-13.0	passed
peak	maxhold	100	1649.30	-31.0	18.0	-13.0	passed
peak	maxhold	100	2474.95	-30.6	17.6	-13.0	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz**

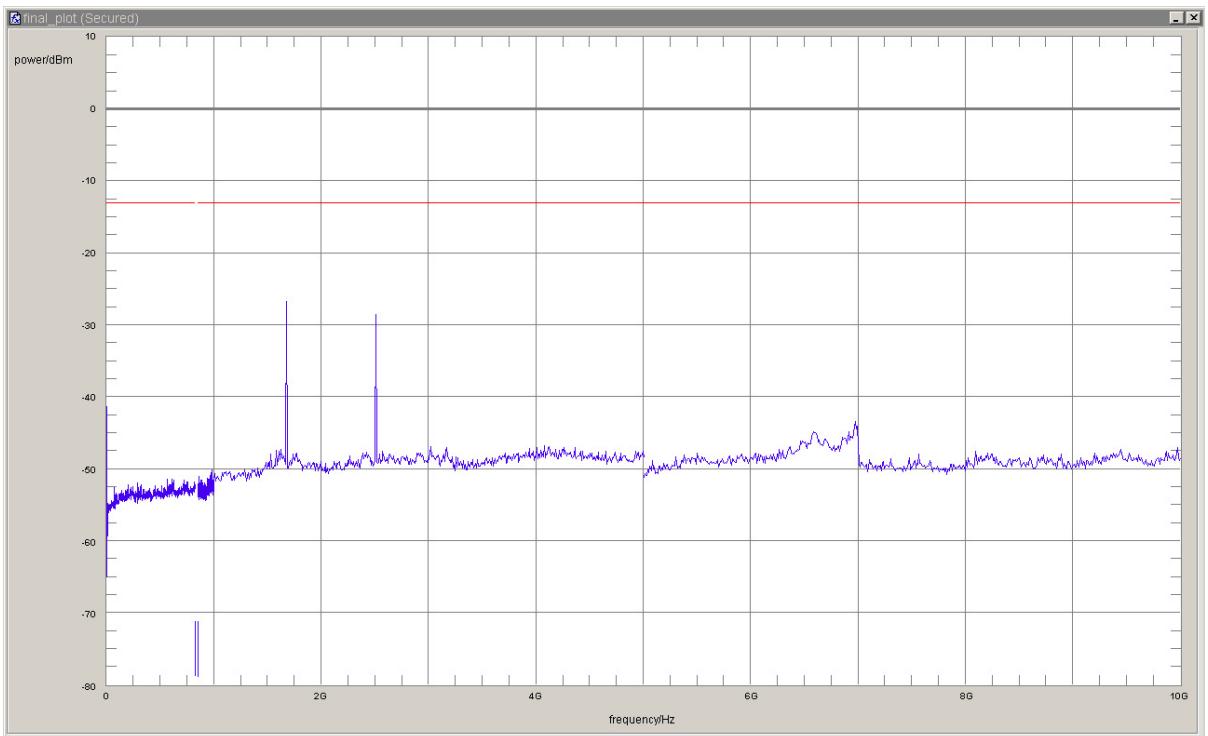
Result: Passed

Setup No.: B01\_direct

Date of Test: 2011/08/19 20:51

Body: FCC47CFRChI PART22PUBLIC MOBILE SERVICES

Test Specification: FCC part 2 and 22

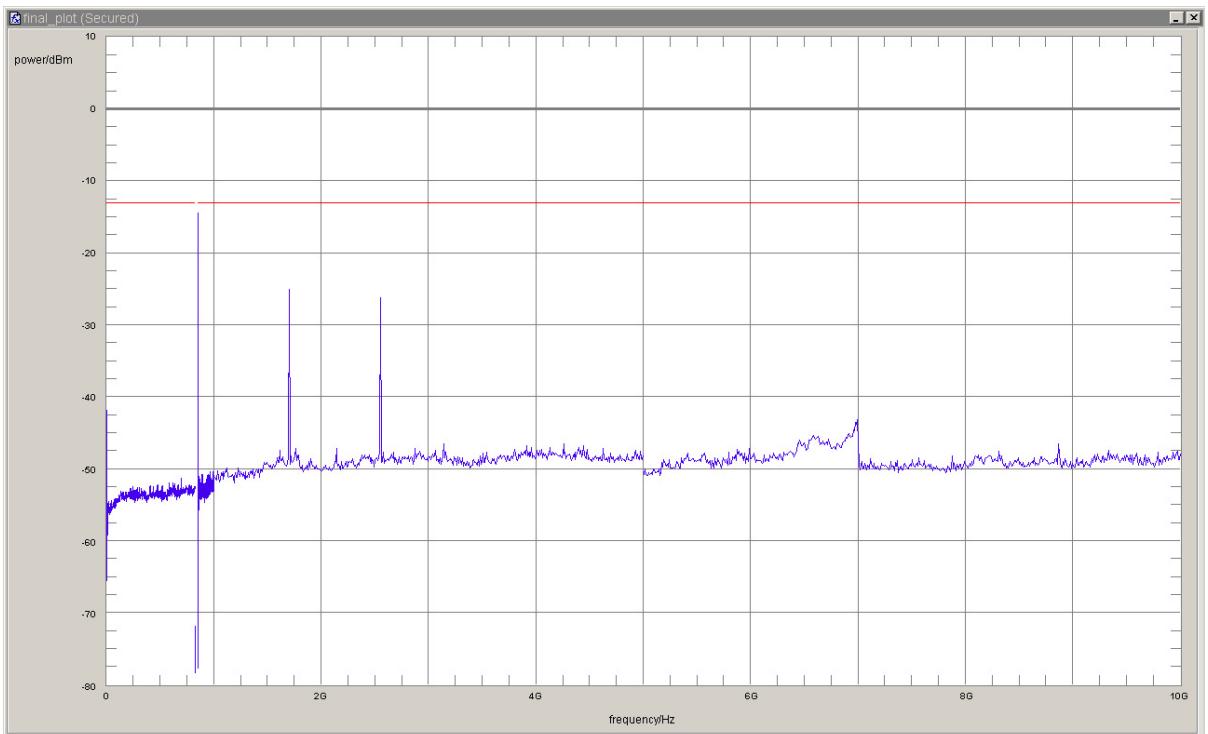
**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
peak	maxhold	100	1673.35	-26.7	13.7	-13.0	passed
peak	maxhold	100	2507.01	-28.5	15.5	-13.0	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz**

*Result:* Passed  
*Setup No.:* B01\_direct  
*Date of Test:* 2011/08/19 21:58  
*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES  
*Test Specification:* FCC part 2 and 22

**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
peak	maxhold	3	849.0020	-17.3	4.3	-13.0	passed
peak	maxhold	3	849.0281	-14.5	1.5	-13.0	passed
peak	maxhold	3	849.0341	-15.7	2.7	-13.0	passed
peak	maxhold	3	849.0541	-18.7	5.7	-13.0	passed
peak	maxhold	3	849.0641	-22.6	9.6	-13.0	passed
peak	maxhold	3	849.0922	-30.9	17.9	-13.0	passed
peak	maxhold	100	1697.39	-25.1	12.1	-13.0	passed
peak	maxhold	100	2547.09	-26.2	13.2	-13.0	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4132, Frequency = 826.4MHz**

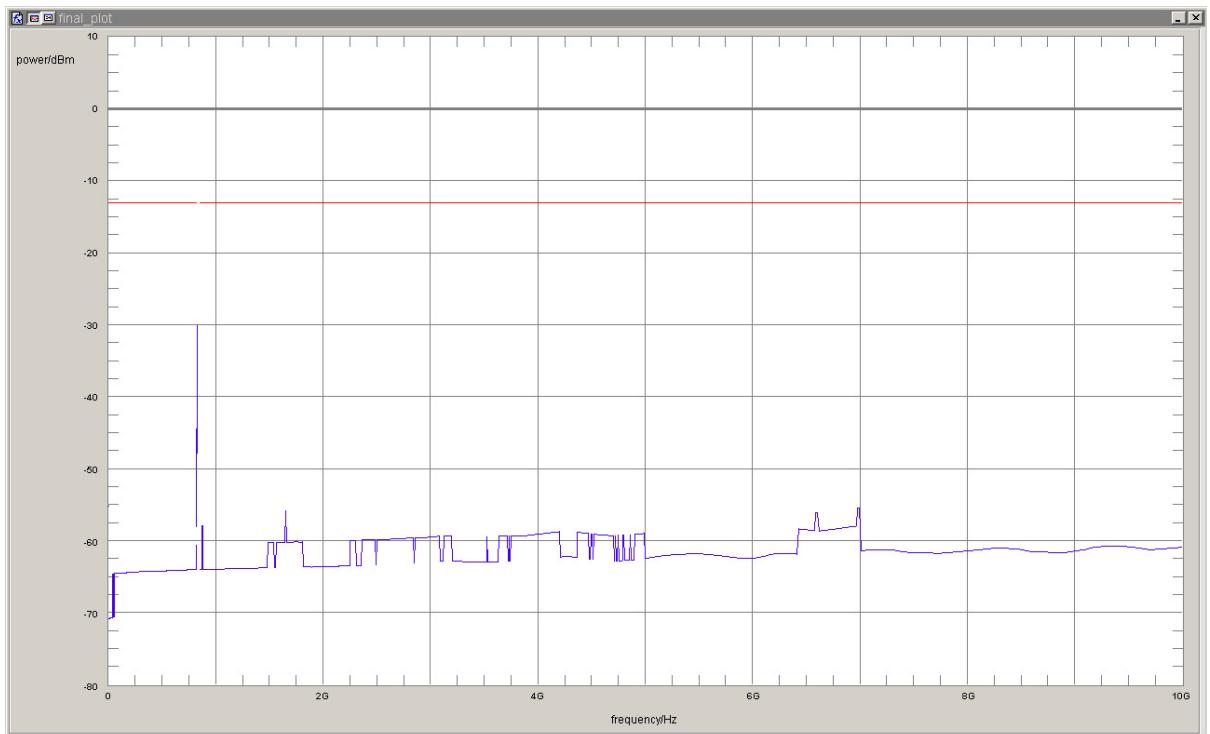
Result: Passed

Setup No.: B01\_direct

Date of Test: 2011/08/19 22:52

Body: FCC47CFRChIPART22PUBLIC MOBILE SERVICES

Test Specification: FCC part 2 and 22

**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
rms	maxhold	50	823.98	-30.1	17.1	-13.0	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency = 836.6MHz**

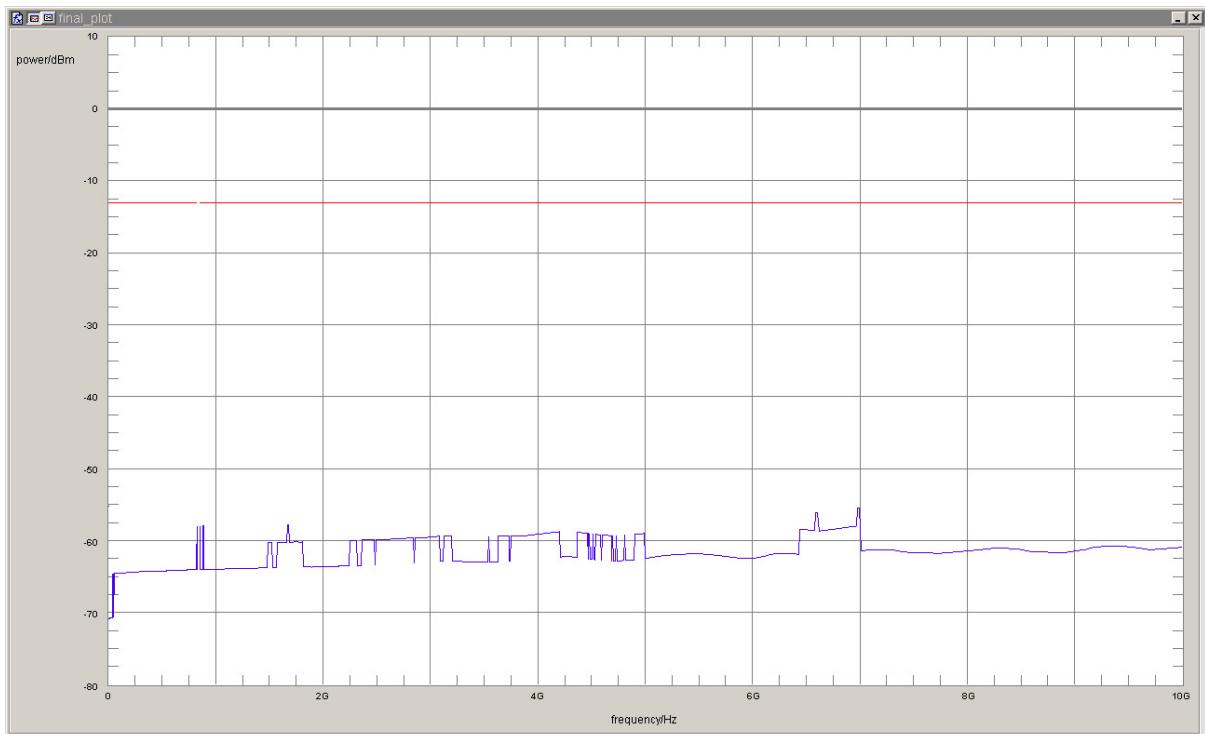
Result: Passed

Setup No.: B01\_direct

Date of Test: 2011/08/19 23:11

Body: FCC47CFRChIPART22PUBLIC MOBILE SERVICES

Test Specification: FCC part 2 and 22

**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
rms	maxhold	1	0.009	-55.22	42.22	-13	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4233, Frequency = 846.6MHz**

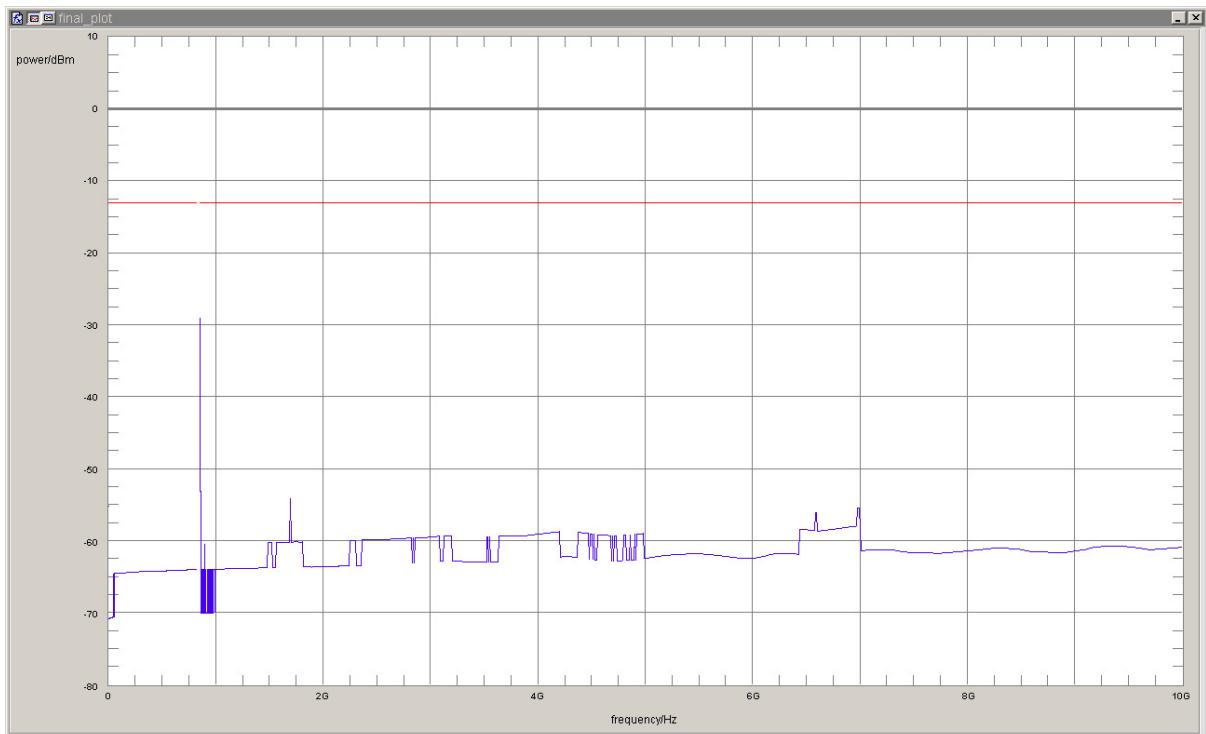
Result: Passed

Setup No.: B01\_direct

Date of Test: 2011/08/19 23:18

Body: FCC47CFRChIPART22PUBLIC MOBILE SERVICES

Test Specification: FCC part 2 and 22

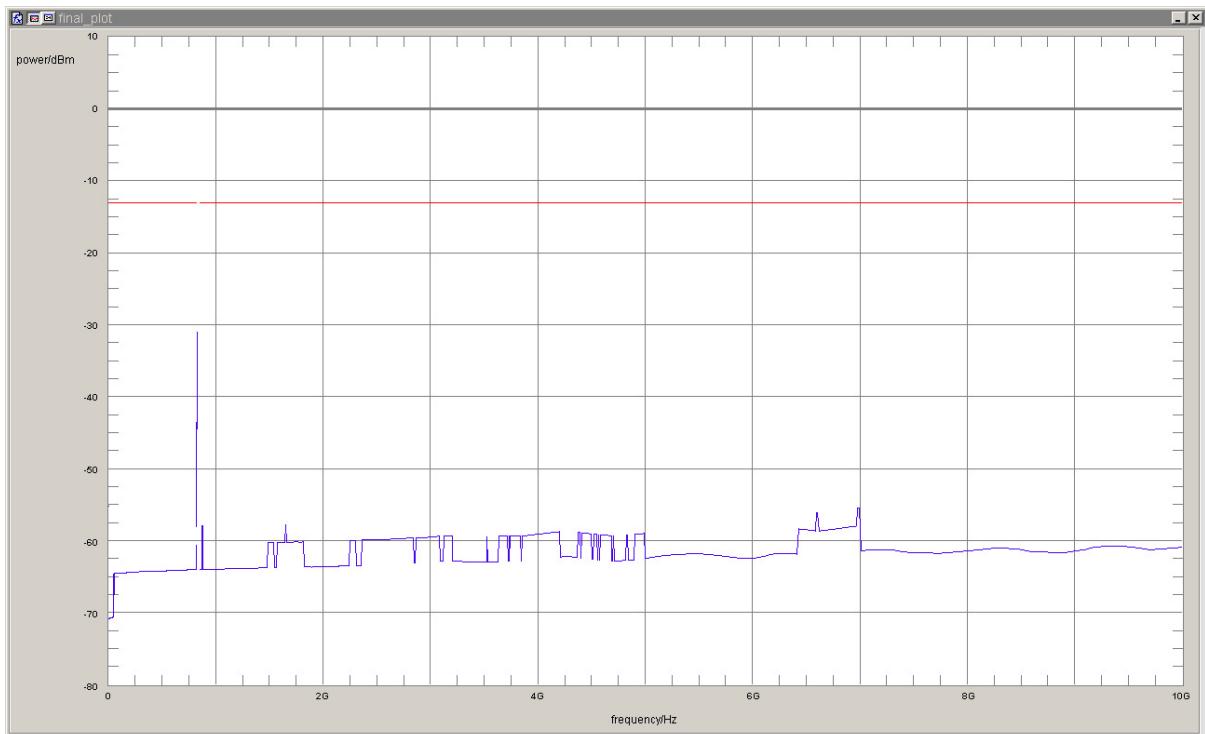
**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
rms	maxhold	50	849.04	-29.1	16.1	-13.0	passed
rms	maxhold	100	850.27	-32.3	19.3	-13.0	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4132, Frequency = 826.4MHz**

*Result:* Passed  
*Setup No.:* B01\_direct  
*Date of Test:* 2011/08/19 23:31  
*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES  
*Test Specification:* FCC part 2 and 22

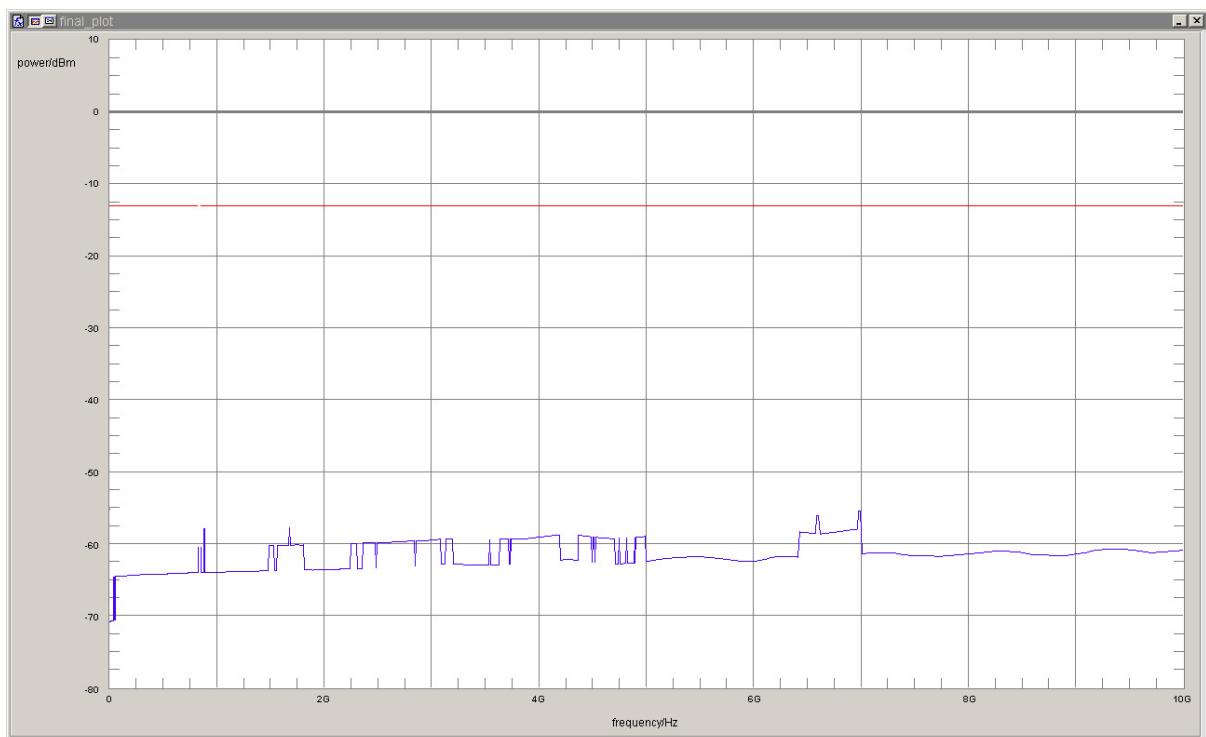
**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
rms	maxhold	100	822.95	-33.0	20.0	-13.0	passed
rms	maxhold	50	823.97	-30.9	17.9	-13.0	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4183, Frequency = 836.6MHz**

*Result:* Passed  
*Setup No.:* B01\_direct  
*Date of Test:* 2011/08/19 23:38  
*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES  
*Test Specification:* FCC part 2 and 22

**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
rms	maxhold	1	0.009	-55.22	42.22	-13	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4233, Frequency = 846.6MHz**

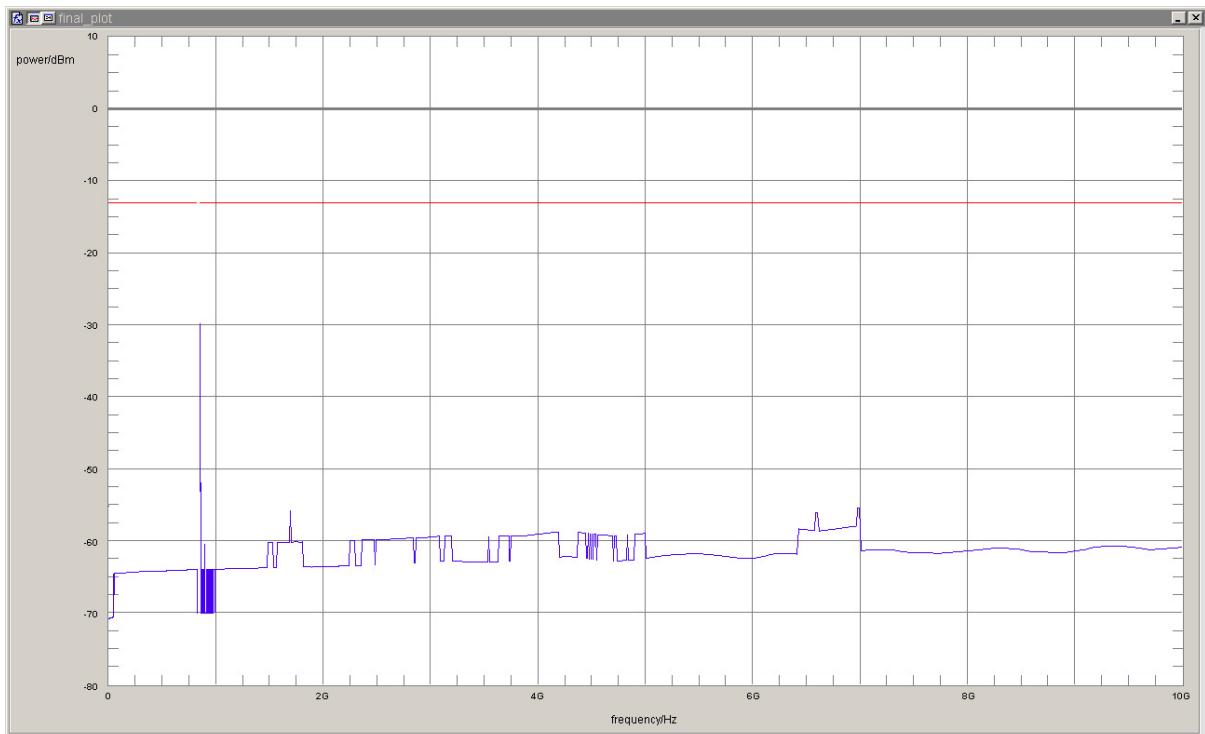
Result: Passed

Setup No.: B01\_direct

Date of Test: 2011/08/19 23:51

Body: FCC47CFRChIPART22PUBLIC MOBILE SERVICES

Test Specification: FCC part 2 and 22

**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
rms	maxhold	50	849.05	-29.8	16.8	-13.0	passed
rms	maxhold	100	850.05	-30.1	17.1	-13.0	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4132, Frequency = 826.4MHz**

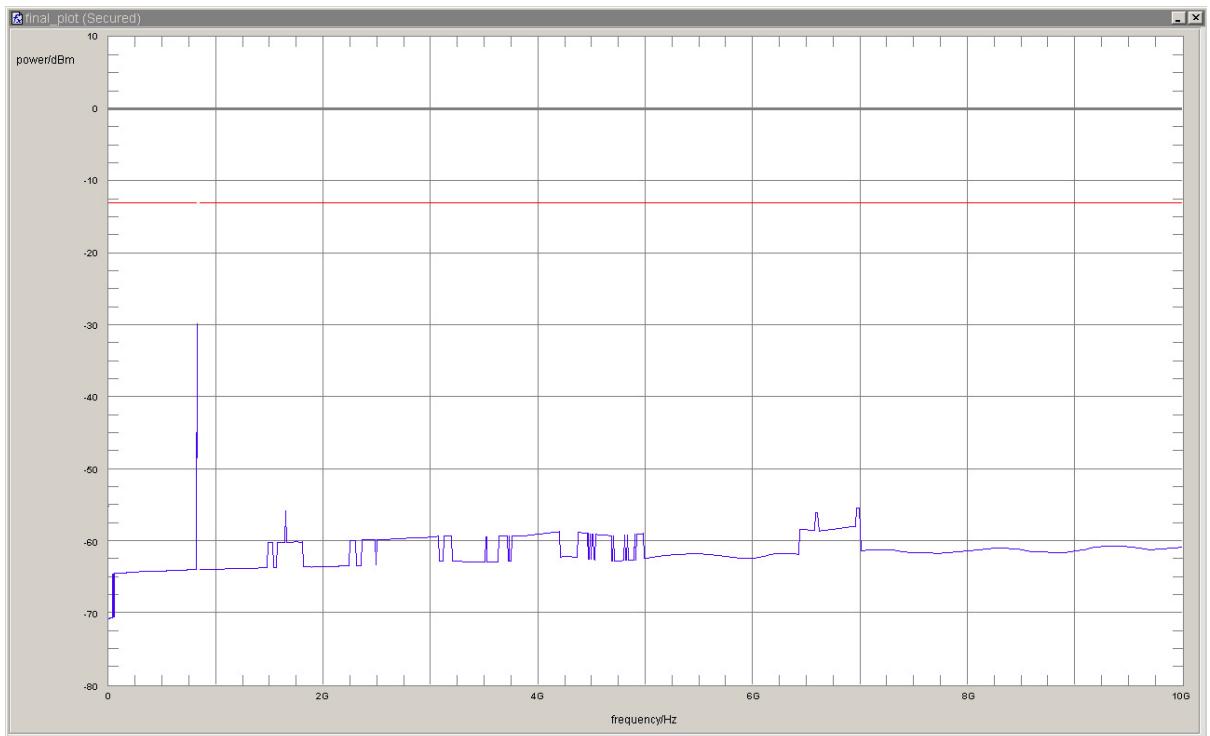
*Result:* Passed

*Setup No.:* B01\_direct

*Date of Test:* 2011/08/19 22:19

*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES

*Test Specification:* FCC part 2 and 22

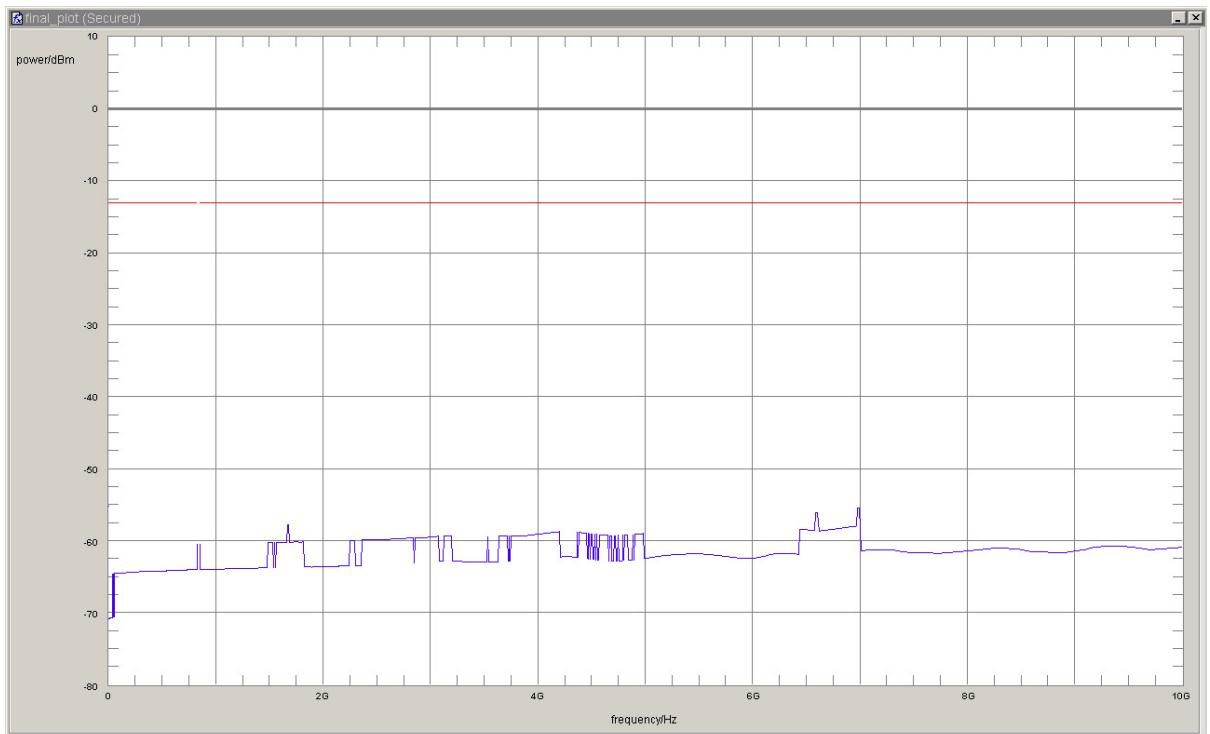
**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
rms	maxhold	100	822.80	-33.0	20.0	-13.0	passed
rms	maxhold	50	823.99	-29.8	16.8	-13.0	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4183, Frequency = 836.6MHz**

*Result:* Passed  
*Setup No.:* B01\_direct  
*Date of Test:* 2011/08/19 22:25  
*Body:* FCC47CFRChIPART22PUBLIC MOBILE SERVICES  
*Test Specification:* FCC part 2 and 22

**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
rms	maxhold	1	0.009	-55.22	42.22	-13	passed

no further values have been found with a margin of less than 20 dB

**Test: 22.3; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4233, Frequency = 846.6MHz**

Result: Passed

Setup No.: B01\_direct

Date of Test: 2011/08/19 22:32

Body: FCC47CFRChIPART22PUBLIC MOBILE SERVICES

Test Specification: FCC part 2 and 22

**Detailed Results:**


detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
rms	maxhold	50	849.05	-28.3	15.3	-13.0	passed
rms	maxhold	100	850.18	-30.6	17.6	-13.0	passed

no further values have been found with a margin of less than 20 dB